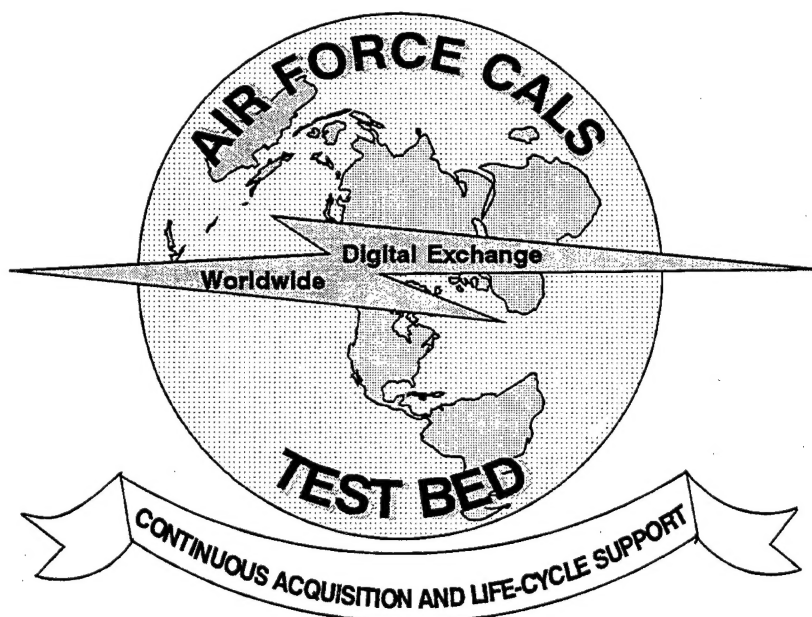


Air Force CALS Test Network

Tapetool Users Manual

AFCTB-ID93-084



19960822 221



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Para 2.5.1

******* NOTE *******

The AFCTN TAPETOOL will only provide support for 300 files. This constrain is due to memory limitation in some systems. It is possible to increase this limit to approximately 900 total files.

Para. 3.1

******* WARNING *******

If you are using raster files that already have CALS headers inserted at the top of the file, you must use the -roff switch when starting TAPETOOL. These raster files are normally created during the conversion process. For example, Inset Systems *HiJaak* will add a dummy CALS header during the conversion routine. This header will normally contain information about the actual raster file such as rdensty, pelcnt and scan directions.

When you add these files to a new document, TAPETOOL creates another header which is appended to the file. This results in double CALS headers, which makes the files non-valid. If you plan on adding this type raster files to your document start TAPETOOL with the -roff switch. This will prevent TAPETOOL from adding a second header to the raster files.

******* WARNING *******

******* WARNING *******

Documents created using the -roff switch will not have valid CALS headers for the raster files. TAPETOOLS should be used to read the document from a directory and correct the raster headers (See 7.2).

******* WARNING *******

Para. 6 Topic 8 & 10

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******* WARNING *******

Para 6.1.1 Topic 6

******* CAUTION *******

Many software application create CALS raster with dummy header files appended to the top of the file. If your application created the files in this manner, TAPETOOL will add a second header to the top of the file during the merge process. To prevent this second header you must start TAPETOOL with the -roff switch.

******* CAUTION *******

******* WARNING *******

Documents created using the -roff switch will not have valid CALS headers for the raster files. TAPETOOLS should be used to read the document from a directory and correct the raster headers (See 7.2).

******* WARNING *******

Para. 6.8

***** CAUTION *****

Many software application create CALS raster with dummy header files appended to the top of the file. If your application created the files in this manner, TAPETOOL will add a second header to the top of the file during the merge process. To prevent this second header you must start TAPETOOL with the -roff switch.

***** CAUTION *****

***** WARNING *****

Documents created using the -roff switch will not have valid CALS headers for the raster files. TAPETOOLS should be used to read the document from a directory and correct the raster headers (See 7.2).

***** WARNING *****

Para. 6.10

***** CAUTION *****

Many software application create CALS raster with dummy header files appended to the top of the file. If your application created the files in this manner, TAPETOOL will add a second header to the top of the file during the merge process. To prevent this second header you must start TAPETOOL with the -roff switch.

***** CAUTION *****

***** WARNING *****

Documents created using the -roff switch will not have valid CALS headers for the raster files. TAPETOOLS should be used to read the document from a directory and correct the raster headers (See 7.2).

***** WARNING *****

AFCTN Test Report
93-084

AFCTB-ID93-084

***** DRAFT *****

TAPETOOL USERS MANUAL

Version 1.2

Release 10

4 September 1993

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1. GENERAL

1.1 Purpose of the User Manual

The objective of this TAPETOOL User Manual is to provide computer users with a detailed operational description of the system, and its associated environment, with which they will be concerned during the performance of their duties.

1.2 References.

- Tapetool User's Manual (Version 1.2). / CALS Test Network User's Manual / 31 December 1990 / Unclassified.
- Installation, Configuration, and Standard Software / Overland Data, Inc. / Installation and User's Manual / 10 November 1988 / Unclassified.
- Computer Logics Nine-Track Technical Reference Manual / June 1991 / Unclassified.

1.3 Specifications and Standards.

- ANSI X3.128 Computer Graphics Metafile (CGM).
- ANSI X3.27 (1987) File Structure and Labeling of Magnetic Tapes for Information Interchange.
- ANSI X3.4 (1986) Coded Character Sets - 7 Bit ASCII.
- ISO 8879 (1986) Information processing - Text and office systems - Standard Generalized Markup Language (SGML).

MIL-D-28000 (1987) Digital Representation for Communication of Product Data: Application Subsets.

MIL-M-28001 (1989) Markup Requirements and Generic Style Specification for Electronic Printed Output and Exchange of Text.

MIL-R-28002 (1989) Raster Graphics Representation In Binary Format.

MIL-D-28003 (1988) Digital Representation for Communication of Illustration Data: CGM Application Profile.

MIL-STD-1840A (1987) Automated Interchange of Technical Information.

1.4 Acronyms.

ANSI American National Standards Institute

CALS Computer-aided Acquisition and Logistic Support

CGM Computer Graphic Metafile

DDF Document Declaration File

DEC Digital Equipment Company - Type of computer system

DTD Document Type Definition

IGES Initial Graphics Exchange Specification

I/O Input/Output

ISO International Organization for Standardization

TAPETOOL USERS MANUAL

KB Kilobyte - a unit of memory in a computer system

MIL Military

MMI Man-Machine Interface

MS-DOS One operating system using on personal computers

OS Operating System

PC Personal Computer

PDL Page Description Language

PRN Printer designation

RAM Random Access Memory

SGML Standard Generalized Markup Language

STD Standard

UNIX a 32-bit operating system using a workstations and larger systems

VAX The computer system manufactured by DEC

VMS The operating system of DEC computer systems

2. SYSTEM OVERVIEW

2.1 System Application

TAPETOOL Version 1.2 Release 10 is a utility program that resides on an IBM PC, or a PC-clone, UNIX and VMS platforms and performs read/write/analysis of data on a 9-track tape according to the

Continuous Acquisition and Life-Cycle Support (CALS) interchange standard (refer to MIL-STD-1840A).

2.2 System Organization

The man-machine interface (MMI) is the means by which the user of the system communicates with TAPETOOL (that is, gives commands and information to the software) and by which the software communicates with the user (that is, provides menus, prompts, and meaningful messages). TAPETOOL is executed on the PC or other hardware platform's, and not only provides the communication for the MMI but also reads/writes information from/to a tape and processes the data. The tool cre-

ates header files, data files, and log files and writes them to the PC or other hardware platform's hard drive or to the tape. The tape to be processed is mounted on the tape drive connected to the PC via the Overland Data 9-track tape coupler model TX-8, the Computer Logics 9-track tape controller or other hardware platform's 9-track systems. Because of differences in hardware and operating systems, tape-tool may need to be modified.

2.3 Software Inventory

The files that make up the TAPETOOL program are the source code files, an object file containing the

tape drive interface, a source system definition file, and the executable file.

TAPETOOL USERS MANUAL

SYSTEM OVERVIEW

Source Code Files
TAPETOOL Source Code Matrix

| | DOS (OVERLAND) | DOS (COMPUTER LOGICS) | UNIX | VMS |
|--------------|-------------------|-----------------------------|------|-----|
| tapetool.c | X | X | X | X |
| ansiread.c | X | X | X | X |
| ansiwrite.c | X | X | X | X |
| maketape.c | X | X | X | X |
| evaluate.c | X | X | X | X |
| cutils.c | X | X | X | X |
| msdosio.c | X1 | X1 | | |
| turboio.c | X2 | X2 | | |
| sunosio.c | | | X | |
| vmsosio.c | | | | X |
| lalltape.obj | X | | | |
| overland.c | X | | | |
| clogics.c | | X | | |
| tdriver.exe | | X | | |

Notes : 1 - Microsoft C Compiler
2 - Turbo C Compiler

Tape Drive Interface Files

LALLTAPE.OBJ - DOS / Overland Data Inc Object File
OVERLAND.C - DOS / TAPETOOL - Overland Data Inc
Interface File

TDRIVER.EXE - DOS / Computer Logics Tape Driver
CLOGICS.C - DOS / TAPETOOL - Computer Logics
Interface File

Source System Definition File - SRCSYS.DEF

Executable File - TAPETOOL.EXE

2.4 Information Inventory

2.4.1 Resource Inventory

- a. File Set Directories (named SETxxx, where xxx ranges from 001 to 999 as specified in MIL-STD-1840A)
- b. Document Directories (named Dxxx, where xxx ranges from 001 to 999 as specified in MIL-STD-1840A, Section 5.1.3)
- c. File Set Description Files (DESCRIP.DEF)
- d. Destination System Definition Files (DSTSYS.DEF)
- e. Document Declaration Header Files (named Dxxx.HDR, where xxx ranges from 001 to 999 as specified in MIL-STD-1840A)
- f. Map Files (MAP.LIS)
- g. Data File Header Files (named Dxxxayyy where xxx ranges from 001 to 999; a is a one character descriptor of the data file type; and yyy ranges from 001 to 999)
- h. Data Files
- i. Source System Definition File (SRCSYS.DEF)
- j. Error Message and Log Files (see Section 2.4.2)

The TAPETOOL directory structure is based on the organization of MIL-STD-1840A interchanges. Each interchange contains a File Set. Each File Set contains one or more Documents and log files from various operations. Each Document contains one Document Declaration File, one map file, and at least one data file. Each data file begins with MIL-STD-1840A header records and continues with

data encoded according to its file type. The map file indicates the source (i.e., file specification) of the data for each data file.

The directory structure begins with an empty directory that is referred to as the TAPETOOL root directory. The TAPETOOL root directory is the depository for the File Set directories. The Source System Definition is also stored in the TAPETOOL root directory so that it is available when any File Set is exported.

A File Set directory is created each time a File Set is extracted from a 9-track tape or a directory. A File Set directory can also be built in TAPETOOL. The Destination System Definition is stored in the File Set directory so that it is available when the File Set is exported. The syntax for a File Set directory name begins with 'SET' and ends with a three digit character string representing the consecutive File Set number.

A Document directory is created in a File Set directory for each Document in the File Set. Each Document directory is named after the Document Declaration File.

2.4.2 Report Inventory

CONTENTS.LOG - Tape Contents Log File
TAPECATA.LOG - Tape Catalog Log File
TAPE_SCN.LOG - Tape Import Log File
TAPE_EXP.LOG - Tape Export Log File
EVALUATE.LOG - File Set Evaluation Log File
MERGESET.LOG - File Set Merge Log File

The TAPETOOL program produces a Tape Label Log file each time a tape is read. It also produces a

TAPETOOL USERS MANUAL SYSTEM OVERVIEW

File Catalog file each time a directory is scanned or a tape is read. The program produces a File Set

Evaluation Log file each time a File Set is evaluated.

2.5 Processsing Overview

The Overland 9-track tape drive interface must be built through the use of a TX-8 controller board.

The Computer Logics 9-track tape controller has similar capabilities.

The code can be compiled and used on other hardware platforms like SUN UNIX and DEC VMS. The resulting systems will operate at the defined system capabilities.

2.5.1 System Requirements

The system requirements are any IBM PC, XT, AT, or fully compatible machine under MS-DOS. The supplied software requires a minimum of 512KB of RAM. No Direct Memory Access channel is required for operation. The MS-DOS system option VERIFY mode is off when using the DOS device driver. The DOS Device Driver (Options Manual) is not required to use the DOS programs provided with the controller. The driver should not be installed unless the tape system is accessed using user-written software since the driver installed uses memory. Versions of the software also exist for the SUN and VAX.

TAPETOOL USERS MANUAL

START UP

3. INITIAL SETUP

3.1 PC Version

The TAPETOOL program is setup to run on any IBM PC or IBM-compatible running MS-DOS Version 3.1 or greater. However, several steps must be followed to ensure it will execute correctly. The steps are as follows:

NOTE

Although TAPETOOL will run on a PC system, it is dependent on the 9-track tape controller card. TAPETOOL is only available compiled for Computer Logic and Overland Data controller cards.

1. Create a directory where the TAPETOOL executable file is to reside using the DOS command 'mkdir' (eg mkdir \tapetool). This new directory is considered the TAPETOOL root directory and all File Set directories are created from it.

2. Copy the TAPETOOL executable file (TAPETOOL.EXE) into the created (root) directory.

3. There are internal parameters which need to be set that are taken from the environment variables. These parameters are set in the AUTOEXEC.BAT file and extracted when program execution begins. The TAPETOOL program expects two environment variables to be declared for device names. These environment variables are TAPE_DRIVE and PRINTER. The following are examples of the statements that should be placed in the AUTOEXEC.BAT file.

```
set TAPE_DRIVE=C:
set PRINTER=AUX
```

When the default printer port (PRN) is used on DOS systems, an environment variable should not be de-

clared for PRINTER. When the PRINTER environment variable is not defined, the PRN device is assumed.

4. After the AUTOEXEC.BAT file has been modified, the computer must be rebooted to enact the new parameters.

5. At this point, the program may be executed by typing the following commands at the DOS system prompt:

```
C> CD \TAPETOOL
C> TAPETOOL
```

NOTE

External parameters can be specified when executing TAPETOOL by placing the parameter name after a '-' followed by a space and its value (if necessary). Each parameter/value must be separated by at least one space. The possible parameters and their meanings are listed below.

- help - lists all of the command line arguments for the program and a brief description of their purpose.
- denv - overrides the Tape Drive Environment Name default.
- drv - overrides the Tape Drive Device default.
- penv - overrides the Print Device Environment Name default.
- que - overrides the Print Queue Device default.
- q - selects the quiet mode (minimizes messages).
- v - selects the verbose mode (maximizes messages).
- nt - numbers data files from 001 per type within the Document.
- nd - numbers data files from 001 per Document.
- roff - Disable merging of raster header files and data.
- ron - Merge raster header files and data.

TAPETOOL USERS MANUAL

START UP

If the 'help' parameter is specified, all other com-

mand line arguments are ignored and execution of the program does not occur.

3.2 UNIX Platforms

The TAPETOOL program may be received to run on UNIX based hardware platforms. Because of the variations in the operating systems, it may be necessary to compile the supplied code on your system. The source code can be provided along with tips on compiling the program. The code is compiled and tested on a SUN 3/280 using SUN OS 4.1.2. Other systems should operate in a similar manner.

1. Create a directory where the TAPETOOL executable file is to reside using the UNIX command 'mkdir' (e.g. mkdir/tapetool). This new directory is considered the TAPETOOL root directory and all File Set directories are created from it.

2. Copy the TAPETOOL executable file (tapetool) into the created (root) directory.

3. There are internal parameters which need to be set that are taken from the environment variables. These parameters are set in the .login file and extracted when program execution begins. The TAPETOOL program expects two environment variables to be declared for device names. These environment variables are TAPE_DRIVE and PRINTER. The following are examples of the statements that should be placed in the .login file. These commands may be typed at the prompt for the initial trial.

```
setenv TAPE_DRIVE /dev/rmt0
setenv PRINTER /dev/lp
```

4. At this point, the program may be executed by typing the following commands at the UNIX system prompt:

```
wpafb2% cd /tapetool (or the subdirectory
                      where the software has been placed)
wpafb2% tapetool
```

All UNIX Operating Systems are case-sensitive. The file names and environment variable names shown in this section are accurate with respect to case.

NOTE

External parameters can be specified when executing tapetool by placing the parameter name after a '-' followed by a space and its value (if necessary). Each parameter/value must be separated by at least one space. The possible parameters and their meanings are listed below.

- help - lists all of the command line arguments for the program and a brief description of their purpose.
- denv - overrides the Tape Drive Environment Name default.
- drv - overrides the Tape Drive Device default.
- penv - overrides the Print Device Environment Name default.
- que - overrides the Print Queue Device default.
- q - selects the quiet mode (minimizes messages).
- v - selects the verbose mode (maximizes messages).
- nt - numbers data files from 001 per type within the Document.
- nd - numbers data files from 001 per Document.

TAPETOOL USERS MANUAL

START UP

- roff - Disable merging of raster header files and data.
- ron - Merge raster header files and data.

If the 'help' parameter is specified, all other command line arguments are ignored and execution of the program does not occur.

3.3 Restart/Recovery Procedures

The only reason for TAPETOOL to abnormally terminate would be a system error. The only

method for restart is to refer back to Section 3.1 Step 5 and begin from that point.

3.4 Phasing.

Once TAPETOOL has been executed, it is self-contained; that is, there will be no need for any in-

tervention until the user terminates the program.

3.5 Diagnostic Procedures

TAPETOOL does not have any real diagnostic procedures; refer to Appendix C for additional in-

formation, error messages, and descriptions of the error messages.

3.6 Error Messages

All error messages are found in Appendix C of this users guide.

TAPETOOL USERS MANUAL

MAIN MENU

4. MAIN MENU

Once the setup procedures, described in Section 3.1, have been performed and the TAPETOOL program executed, the start up text and the MAIN MENU are displayed (see Figure 4.0-1). The MAIN MENU is

the top-level menu that allows the user to step through the necessary functions needing to be performed. Each of the MAIN MENU options is described below.

```
+++++
CALS Test Network TAPETOOL Software - Version 1.2; Release 10 (C)
+++++

=====
MAIN MENU
=====
1 - Housekeeping
2 - Build MIL-STD-1840A Files
3 - Evaluate MIL-STD-1840A Files
4 - Help
5 - Exit program
=====

Enter number followed by a RETURN =>

+++++
```

Figure 4.0-1 MAIN MENU

If the start up text appears as in Figure 4.0-2, the PRINTER and/or the TAPE_DRIVE environment variables have not been defined. Most of the TAPETOOL functions will perform properly, ex-

cept possibly the functions that interact with the printer or tape drive. If the user experiences difficulty accessing these devices, terminate the TAPETOOL program and refer to Section 3.1.

TAPETOOL USERS MANUAL

MAIN MENU

```
+++++
CALTS Test Network TAPETOOL Software - Version 1.2; Release 10 (C)

*** NOTE - Environment Name PRINTER is not defined.

*** NOTE - Environment Name TAPE_DRIVE is not defined.

=====
MAIN MENU

 1 - Housekeeping
 2 - Build MIL-STD-1840A Files
 3 - Evaluate MIL-STD-1840A Files
 4 - Help
 5 - Exit program
=====

Enter number followed by a RETURN =>

+++++
```

Figure 4.0-2 MAIN MENU with PRINTER and TAPE_DRIVE Undefined

1 - Housekeeping menu option allows the user to manipulate File Sets, Documents, and document files. (See Chapter 5)

2 - Build MIL-STD-1840A Files menu option allows the user to create and evaluate Documents that will be written onto an ANSI X3.27 compliant 9-track tape. (See Chapter 6)

3 - Evaluate MIL-STD-1840A Files menu option allows the user to check the format and the structure of a MIL-STD-1840A File Set, against the requirements of the MIL-STD-1840A standard. The source of the File Set may be Documents that have been imported from an ANSI X3.27 compliant 9-track tape, or another directory on the system. The files are copied into a File Set Directory created for the operation. Then according to the MIL-STD-1840A file naming conventions, a Document Directory is created for each Document imported. The files are copied into the appropriate Document Directory. The MIL-STD-1840A Header Records are stripped from each data file and evaluated against the standard. (See Chapter 7)

4 - Help menu option will contribute to the understanding of using the TAPETOOL program by displaying portions of this manual. It has not been implemented yet. (See Chapter 8)

5 - Exit program menu option terminates the program normally and returns you to the system prompt. (See Chapter 9)

If the user enters any input other than a '1', '2', '3', '4', '5', or carriage return, an error message indicating an invalid response is printed on the screen and the MAIN MENU is redisplayed. If the user enters a carriage return, an error message indicating the lack of a valid response is displayed and the MAIN MENU is redisplayed.

A default Source System Identification must be defined before the MAIN MENU will be displayed. This value is stored in the SRCSYS.DEF file located in the TAPETOOL root directory. If the file exists, the default value is read and the MAIN MENU will be displayed. If it does not exist, the TAPETOOL program prompts the user to give a value for the source system and then it creates this file.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

5. HOUSEKEEPING MENU

Once the user has entered a '1' while in the MAIN MENU (see Section 4.0), the HOUSEKEEPING MENU is displayed (see Figure 5.0-1). The HOUSEKEEPING MENU is the primary menu for

manipulating File Sets, Documents, and document files. Each of the HOUSEKEEPING MENU options is described below.

```
+++++
=====
HOUSEKEEPING MENU

1 - Remove a File Set
2 - Remove a Document from a File Set
3 - Remove a File from a Document
4 - Renumber Files in a Document
5 - Copy a Document to a File Set
6 - Modify the Source System Identification
7 - Modify a File Set Description
8 - List File Sets and Documents
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>

+++++
```

Figure 5.0-1 HOUSEKEEPING MENU

1 - Remove a File Set menu option removes any File Set that is no longer needed. The user will be required to select a File Set and verify that it should be deleted. After deleting the File Set, all subsequent File Set names will be renumbered accordingly. When File Sets are renumbered, the Map Files for all Documents in each File Set will be updated if there are references to the old File Set name. (See Section 5.1)

2 - Remove a Document from a File Set menu option removes any Document contained in a File Set when it is no longer needed. The user will be required to select a File Set and a Document. Then the user will be prompted to verify that it should be deleted. After deleting the Document, all subsequent Document names will be renumbered accordingly. When Documents are renumbered, the Map File for each Document will be updated if there are

references to the old Document name. (See Section 5.2)

3 - Remove a File from a Document menu option removes a file contained in a Document when it is no longer needed. The user will be required to select a File Set and Document. All of the files or just selected files may be deleted for a specific file type (i.e., Raster, IGES, etc.). Then the user will be prompted to verify that the deletion should be executed. After deleting the file(s), all subsequent file names will be renumbered accordingly. When files are renumbered, the Map File in each Document will be updated to remove any reference to the files deleted and to change the file names that were renumbered. The File Count (filcnt:) field of the Document Declaration File will be changed to reflect the change in the number of files that the Document contains. (See Section 5.3)

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

4 - Renumber Files in a Document menu option rennumbers the files contained in a Document if they are not currently numbered correctly. The user will be required to select a File Set and a Document. When files are renumbered the Map File in the Document will be updated to change the file names that were renumbered. The File Count (filcnt:) field of the Document Declaration File will be verified and then, in case of an error, changed to reflect the number of files that the Document contains. (See Section 5.4)

5 - Copy a Document to a File Set menu option copies a Document from one File Set to another. The user will be required to select a source File Set, source Document, and target File Set. When the Document is copied, the Map File in the target Document will be updated to reflect the new Document and File Set names. (See Section 5.5)

6 - Modify the Source System Identification menu option modifies the Source System Identification contained in the Document Declaration File. Every Document Declaration File made, using this software, will contain a Source System Identification. It should be entered from this function or whenever it is needed and not defined. According to MIL-STD-1840A, this character string should include the name, address, and other information needed to identify the system from which the information originated. (See Section 5.6)

7 - Modify a File Set Description menu option modifies the File Set description. In order to distinguish between File Sets kept in a root directory, a

File Set description is requested when a File Set Directory is created. The description may be changed in this function. It will be displayed with its File Set number whenever a list of File Sets is requested. (See Section 5.7)

8 - List File Sets and Documents menu option lists the desired File Sets, and the desired Documents within the File Sets. A list of File Sets and Documents within a chosen File Set may be displayed in this function. The list of File Sets will be displayed automatically. Each File Set number and its File Set description will be displayed. The user may choose to list the Documents in a File Set or exit the function immediately. A File Set may be selected by entering its corresponding number. When the Documents in a File Set are listed, each line will contain the Document Declaration File name and the value from the 'srcdocid:' field of the file. (See Section 5.8)

9 - Return to the Main Menu menu option returns control to the MAIN MENU for further instructions. (See Section 5.9)

If the user enters any input other than a '1', '2', '3', '4', '5', '6', '7', '8', '9', or carriage return, an error message indicating an invalid response is printed on the screen and the HOUSEKEEPING MENU is redisplayed. If the user enters a carriage return, an error message indicating the lack of a valid response is displayed and the HOUSEKEEPING MENU is redisplayed.

5.1 Remove a File Set

Once the user has entered a '1' while in the HOUSEKEEPING MENU (see Section 5.0), the 'Remove a File Set' screen is displayed (see Figure 5.1-1). The 'Remove a File Set' option was briefly explained in Section 5.0. If there are no File Sets residing in the TAPETOOL directory, a message

stating that there are no File Sets is displayed and the HOUSEKEEPING MENU is redisplayed. If there is only one File Set residing in the TAPETOOL directory, a message is displayed indicating that, and the user is prompted to confirm whether the File Set should be removed.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
REMOVE WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.1-1 'Remove a File Set' Screen

5.1.1 Control Inputs

The user enters a number from 1 to the total number of File Sets created (in this example, it is 6). When the user enters a valid File Set number (in this example, it is also 6), then the screen illustrated in Figure 5.1.1-1 is displayed. If the user enters a 'D'

to display the list of File Sets, then the screen illustrated in Figure 5.1.1-2 is displayed. If the user enters a carriage return, the HOUSEKEEPING MENU is redisplayed (see Figure 5.0-1).

```
+++++
REMOVE WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 6

Remove SET006, are you sure ('YES' or 'NO')?

+++++
```

Figure 5.1.1-1 Confirmation to Remove File Set Screen

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
REMOVE WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => D

List of current File Set directories:

Set          Description
-----
SET001  File Set 1
SET002  File Set 2
SET003  File Set 3
SET004  File Set 4
SET005  File Set 5
SET006  CALS Test

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>
+++++
```

Figure 5.1.1-2 List Of File Sets Display

Once the user has entered a valid File Set number or there is only one File Set, the user is asked to confirm whether the File Set should be removed or not (refer to Figure 5.1.1-1). If the user desires to remove the File Set, a 'YES' is entered, a message indicating that TAPETOOL is working on removing the File Set is displayed, and the HOUSEKEEPING MENU is redisplayed. If the user decides not to remove the File Set, a 'NO' is entered, a message indicating that the File Set was not removed is displayed, and the HOUSEKEEPING MENU is redis-

played.

5.1.2 Management Information

If the user enters a number that is outside the range of total File Sets or enters any other input, such as an alphanumeric value, an error message is displayed indicating this error, and the 'Remove a File Set' screen is redisplayed.

5.2 Remove Document From File Set

Once the user has entered a '2' while in the HOUSEKEEPING MENU (see Section 5.0), the 'Remove a Document From a File Set' screen is displayed (see Figure 5.2-1). The 'Remove a Document From a File Set' option was briefly explained in Section 5.0. The user must first enter the File Set from which the Document is to be removed. If

there are no File Sets residing in the TAPETOOL directory, a message is displayed indicating that there are no File Sets and the HOUSEKEEPING MENU is redisplayed. If there is only one File Set residing in the TAPETOOL directory, it is automatically chosen as the File Set to be used, and the request for which Document to remove is given.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
REMOVE DOCUMENT FROM WHICH FILE SET?...

Enter a File Set number, 1..5
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.2-1 'Remove a Document From a File Set' Screen

5.2.1 Control Inputs

The user enters a number from 1 to the total number of File Sets created (in this example, it is 4). When the user enters a valid File Set number (in this example, it is 1), then the screen illustrated in Figure 5.2.1-1 is displayed. If the user enters a

'D' to display the list of Documents, then the screen illustrated in Figure 5.2.1-2 is displayed. If the user enters a carriage return, the HOUSEKEEPING MENU is redisplayed. If there are no Documents in the selected File Set, a message is displayed indicating the lack of any Documents and the HOUSEKEEPING MENU is redisplayed.

```
+++++
REMOVE DOCUMENT FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

REMOVE WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.2.1-1 'Remove A Document From A File Set' Screen

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
REMOVE DOCUMENT FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

REMOVE WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => D

List of current Document directories:

DDF      Title from srcdocid field
-----
D001     TEST DOCUMENT 1
D002     TEST DOCUMENT 2

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>
+++++
```

Figure 5.2.1-2 Display The Documents Screen

Once the user enters a valid Document number, then the user is requested to confirm the removal of the Document (see Figure 5.2.1-3). If there is only one Document within the chosen File Set, it is automatically chosen as the Document to be removed, and the user is requested to confirm the removal of it. If

the user enters a 'YES' then the Document is removed from the File Set and the HOUSEKEEPING MENU is redisplayed (see Figure 5.2.1-4). If the user enters a 'NO' then a message is displayed indicating that the Document was not removed and the HOUSEKEEPING MENU is redisplayed.

```
+++++
REMOVE DOCUMENT FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

REMOVE WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

Remove D002 from SET001, are you sure ('YES' or 'NO')?
+++++
```

Figure 5.2.1-3 Confirmation Of The Removal Of The Document Screen

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

Remove D002 from SET001, are you sure ('YES' or 'NO')? YES

Working.....

=====
HOUSEKEEPING MENU

1 - Remove a File Set
2 - Remove a Document from a File Set
3 - Remove a File from a Document
4 - Renumber Files in a Document
5 - Copy a Document to a File Set
6 - Modify the Source System Identification
7 - Modify a File Set Description
8 - List File Sets and Documents
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 5.2.1-4 Removal Of The Document Screen

5.2.2 Management Information

If the user enters a number that is outside of the range of total File Sets or enters any other input, such as an alphanumeric value, an error message is displayed indicating this error and the 'Enter a File Set number' prompt is redisplayed. If the user en-

ters a correct File Set number but enters a number that is outside the range of total Documents for that File Set or enters any other input, such as an alphanumeric value, an error message is displayed indicating this error and the 'Enter a Document number' prompt is redisplayed. If the user removes the only Document remaining in the File Set, the File Set is removed as well.

5.3 Remove a File From a Document

Once the user has entered a '3' while in the HOUSEKEEPING MENU (see Section 5.0), the 'Remove a File From a Document' screen is displayed (see Figure 5.3-1). The 'Remove a File From a Document' option was briefly explained in Section 5.0. The user must enter the File Set first and then the Document from which the file is to be removed. If there are no File Sets residing in the

TAPETOOL directory, a message is displayed indicating that there are no File Sets and the HOUSEKEEPING MENU is redisplayed. If there is only one File Set residing in the TAPETOOL directory, a message indicating that the only File Set is assumed and the request for which Document to remove the file from is given.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
REMOVE FILE FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.3-1 'Remove a File From a Document' Screen

5.3.1 Control Inputs

The user enters a number from 1 to the total number of File Sets created (in this example, it is 3) or a 'D' to display the list of File Sets. When the user enters a valid File Set number (in this example, it is 1), then the screen illustrated in Figure

5.3.- 1-1 is displayed. If the user enters a 'D', the list of Documents in the selected File Set is displayed. If the user enters a carriage return, the HOUSEKEEPING MENU is redisplayed. If there are no Documents in the selected File Set, a message is displayed indicating the lack of a Document and the HOUSEKEEPING MENU is redisplayed.

```
+++++
REMOVE FILE FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

REMOVE FILE FROM WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.3.1-1 Enter Document Number Screen

Once the user enters a valid Document number, the user is prompted to enter the file type of the file to be removed (see Figure 5.3.1-2). If there is only one Document within the chosen File Set and only one data file within that Document, an error message is generated and the HOUSEKEEPING MENU is redisplayed (see Figure 5.3.- 1-3).

MIL-STD-1840A Section 5.1 requires a File Set have at least one data file. If the user enters a 'D', a list of all data files within the selected Document is displayed (see Figure 5.3.1-4). If the user enters a carriage return to cancel the function, the HOUSEKEEPING MENU is redisplayed.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
REMOVE FILE FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

REMOVE FILE FROM WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

Enter a file type to remove (i.e., 'R' for Raster,
do not specify a ddf type).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.3.1-2 Enter The File Type Of The File To Remove Screen

```
+++++
Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 3

D001 is all that exists; assumed...

*** ERROR (MIL-STD-1840A; 5.1) - D001C001 is all that exists.
    A File Set must have at least one data file.

=====
HOUSEKEEPING MENU

1 - Remove a File Set
2 - Remove a Document from a File Set
3 - Remove a File from a Document
4 - Renumber Files in a Document
5 - Copy a Document to a File Set
6 - Modify the Source System Identification
7 - Modify a File Set Description
8 - List File Sets and Documents
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>

+++++
```

Figure 5.3.1-3 Only One Data File in Selected File Set Screen

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
REMOVE FILE FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

REMOVE FILE FROM WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

Enter a file type to remove (i.e., 'R' for Raster,
do not specify a ddf type).
Enter 'D' to display or press RETURN to cancel => D

List of current data Files:

D002C001
D002R002

Enter a file type to remove (i.e., 'R' for Raster,
do not specify a ddf type).
Enter 'D' to display or press RETURN to cancel =>
+++++
```

Figure 5.3.1-4 List Of Files in Selected Document Screen

Once the user enters a valid file type, the user is prompted to enter the number of the file to be removed, 'ALL' for all files of that type, a 'D' to display all files of that type, or a carriage return to cancel. This prompt will be bypassed if there is only one file of the selected file type (see Figure 5.3.1-5). The user is then prompted to confirm the removal of the file(s). If the user enters a

'YES' then the files of the selected type are removed from the Document and the HOUSEKEEPING MENU is redisplayed (see Figure 5.3.1-6). If the user enters a 'NO' then a message is displayed indicating that no files of the selected type were removed and the HOUSEKEEPING MENU is redisplayed.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
REMOVE FILE FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

REMOVE FILE FROM WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

Enter a file type to remove (i.e., 'R' for Raster,
do not specify a ddf type).
Enter 'D' to display or press RETURN to cancel => R

Remove all Raster Files from D002, are you sure ('YES' or 'NO')?
+++++
```

Figure 5.3.1-5 Confirmation Of Removal Of All Files With Selected Type Screen

```
+++++
Remove all Raster Files from D002, are you sure ('YES' or 'NO')? YES

Working.....

      1 file(s) copied

Working...

=====
HOUSEKEEPING MENU

1 - Remove a File Set
2 - Remove a Document from a File Set
3 - Remove a File from a Document
4 - Renumber Files in a Document
5 - Copy a Document to a File Set
6 - Modify the Source System Identification
7 - Modify a File Set Description
8 - List File Sets and Documents
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 5.3.1-6 Removal Of The Selected File Type Screen

5.3.2 Management Information

If the user enters a number that is outside the range of total File Sets or enters any other input, such as a

alphanumeric value, an error message is displayed, indicating this error, and the 'Enter a File Set number' prompt is redisplayed. If the user enters a correct File Set number but enters a number that is outside the range of total Documents for that File Set,

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

or enters any other input, such as an alphanumeric value, an error message is displayed indicating this error and the 'Enter a Document number' prompt is redisplayed. If the user enters a valid Document

number but enters a character that is not a valid file type, then an error message is displayed and the 'Enter a File Type' prompt is redisplayed (see Figure 5.3.2-1).

```
+++++
REMOVE FILE FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

REMOVE FILE FROM WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

Enter a file type to remove (i.e., 'R' for Raster,
do not specify a ddf type).
Enter 'D' to display or press RETURN to cancel => K

*** ERROR (MIL-STD-1840A; 5.1.3) - A valid file type was not
    found for 'K'.

Enter a file type to remove (i.e., 'R' for Raster,
do not specify a ddf type).
Enter 'D' to display or press RETURN to cancel =>
+++++
```

Figure 5.3.2-1 Invalid File Type Input Error Message

5.4 Renumber Files In a Document

Once the user has entered a '4' while in the HOUSEKEEPING MENU (see Section 5.0), the 'Renumber Files In a Document' screen is displayed (see Figure 5.4-1). The 'Renumber Files In a Document' option was briefly explained in Section 5.0. If there are no File Sets residing in the TAPETOOL directory, a message stating:

"there are no File Sets" is displayed and the HOUSEKEEPING MENU is redisplayed. If there is only one File Set residing in the TAPETOOL directory, a message is displayed indicating that and the prompt to enter the desired Document is displayed.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
RENUMBER DOCUMENT FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.4-1 'Renumber Files In a Document' Screen

5.4.1 Control Inputs

The user enters a number from 1 to the total number of File Sets created (in this example, it is 3), or a 'D' to display the list of File Sets. When the user enters a valid File Set number (in this example, it is 1), then the screen illustrated in Figure 5.4.- 1-1

is displayed. If the user enters a 'D', the list of Documents in the selected File Set is displayed. If the user enters a carriage return, the HOUSEKEEPING MENU is redisplayed. If there are no Documents in the selected File Set, a message is displayed indicating the lack of any Documents and the HOUSEKEEPING MENU is redisplayed.

```
+++++
RENUMBER DOCUMENT FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

RENUMBER WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.4.1-1 Enter Which Document Screen

Once the user enters a valid Document number, the files within the selected Document are renumbered. A message indicating "the program is working on renumbering the files" is displayed followed by a message stating the number of files that had to be renumbered (see Figure 5.4.1-2), and then the

HOUSEKEEPING MENU is redisplayed. If no files need to be renumbered within the selected Document, a message indicating such is displayed and the HOUSEKEEPING MENU is redisplayed.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
RENUMBER DOCUMENT FROM WHICH FILE SET?...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

RENUMBER WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

Working.....

      1 file(s) copied

Working...

1 file(s) had to be renumbered.

=====
HOUSEKEEPING MENU

1 - Remove a File Set
2 - Remove a Document from a File Set
3 - Remove a File from a Document
4 - Renumber Files in a Document
5 - Copy a Document to a File Set
6 - Modify the Source System Identification
7 - Modify a File Set Description
8 - List File Sets and Documents
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 5.4.1-2 Renumbering the Files Screen

5.4.2 Management Information

If the user enters a number that is outside the range of total File Sets or enters any other input, such as an alphanumeric value, an error message is displayed indicating this error, and the 'Enter a

File Set number' prompt is redisplayed. If the user enters a correct File Set number but enters a number that is outside the range of total Documents for that File Set, or enters any other input, such as an alphanumeric value, an error message is displayed indicating this error and the 'Enter a Document number' prompt is redisplayed.

5.5 Copy a Document to a File Set

Once the user has entered a '5' while in the HOUSEKEEPING MENU (see Section 5.0), the 'Copy a Document to a File Set' screen is dis-

played (see Figure 5.5-1). The 'Copy a Document to a File Set' option was briefly explained in Section 5.0. If there are no File Sets residing in the

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HOUSEKEEPING MENU

TAPETOOL directory, a message stating: "there are no File Sets" is displayed and the HOUSEKEEPING MENU is redisplayed. If there is only one File Set residing in the TAPETOOL directory,

a message is displayed indicating that and the prompt to enter the desired Document is displayed.

```
+++++
DETERMINE A SOURCE FILE SET...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.5-1 'Copy a Document To a File Set' Screen

5.5.1 Control Inputs

The user enters a number from 1 to the total number of File Sets created (in this example, it is 3), or a 'D' to display the list of File Sets. When the user enters a valid File Set number (in this example, it is 1), then the screen illustrated in Figure 5.5.1-1 is

displayed. If the user enters a 'D', the list of Documents in the selected File Set is displayed. If the user enters a carriage return, the HOUSEKEEPING MENU is redisplayed. If there are no Documents in the selected File Set, a message is displayed indicating the lack of a Document and the HOUSEKEEPING MENU is redisplayed.

```
+++++
DETERMINE A SOURCE FILE SET...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

DETERMINE A SOURCE DOCUMENT...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.5.1-1 Enter Source Document Number Screen

Once the user enters a valid Document number, the user is prompted to select a File Set (see Figure 5.5.1-2). The user may enter a 'D' to display the available File Sets. However, this prompt also

allows the user to create a File Set. To create a File Set, the user enters 'C' and then must enter a File Set description (see Figure 5.5.1-3).

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```
+++++
DETERMINE A SOURCE FILE SET...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

DETERMINE A SOURCE DOCUMENT...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

DETERMINE A TARGET FILE SET...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel =>
+++++
```

Figure 5.5.1-2 Enter a Target File Set Screen

```
+++++
DETERMINE A SOURCE FILE SET...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

DETERMINE A SOURCE DOCUMENT...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

DETERMINE A TARGET FILE SET...

Enter a File Set number, 1..3
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel => C

Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
Target File Set
+++++
```

Figure 5.5.1-3 Create a New File Set Screen

Once the target File Set has been selected, the user is prompted to confirm copying the Document from the source File Set to the target File Set (see Figure 5.5.1-4). If the user enters a 'YES', a message is displayed indicating that the system is working on copying the file, followed by a mes-

sage indicating that the Document was copied to the selected target File Set, and then the HOUSEKEEPING MENU is redisplayed. If the user enters a 'NO', the Document is not copied, a message is displayed indicating this, and the HOUSEKEEPING MENU is redisplayed.

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HOUSEKEEPING MENU

```
+++++
DETERMINE A SOURCE FILE SET...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

DETERMINE A SOURCE DOCUMENT...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

DETERMINE A TARGET FILE SET...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel => 2

Copy D002 from SET001 to SET002, are you sure ('YES' or 'NO')?
+++++
```

Figure 5.5.1-4 Confirmation of Copying Document to File Set Screen

5.5.2 Management Information

At any prompt, if the user enters a number that is outside the valid range or enters any other invalid

input, an error message is displayed and the prompt is redisplayed. If the user creates a new File Set, any character input is valid for the File Set description.

5.6 Modify Source System Identification

Once the user has entered a '6' while in the HOUSEKEEPING MENU (see Section 5.0), the 'Modify the Source System Identification' screen

is displayed (see Figure 5.6-1). The 'Modify the Source System Identification' option was briefly explained in Section 5.0.

```
+++++
The current default value of source system is:
srcsys: CALS Test Bed

Enter 'Y' to modify this record or RETURN for no modifications =>
+++++
```

Figure 5.6-1 Modify Source System Identification Screen

5.6.1 Control Inputs

If the user enters a carriage return, the HOUSEKEEPING MENU is redisplayed. If the user enters a 'Y', the user is prompted to enter a new

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

Source System Identification (see Figure 5.6.1-1). Once the user enters a Source System Identification, the system displays a message indicating that it is working on modifying the existing Source System Identification to the new value. Once the Source System Identification has been modified,

the HOUSEKEEPING MENU is redisplayed (see Figure 5.6.1-2). If the user enters a 'Y' but decides not to modify the Source System identification, a carriage return is entered and the HOUSEKEEPING MENU is redisplayed.

```
+++++
The current default value of source system is:
srcsys: CALS Test Bed

Enter 'Y' to modify this record or RETURN for no modifications => Y

Enter a value for the 'srcsys: ' field for Document
(maximum record size = 256), or press RETURN to cancel =>
srcsys:
+++++
```

Figure 5.6.1-1 Modify Source System Identification Prompt

```
+++++
The current default value of source system is:
srcsys: CALS Test Bed

Enter 'Y' to modify this record or RETURN for no modifications => Y

Enter a value for the 'srcsys: ' field for Document
(maximum record size = 256), or press RETURN to cancel =>
srcsys: NEW CALS SRCSYS

Enter continuation of current 256 character record input,
or press RETURN to complete =>

Working...

=====
HOUSEKEEPING MENU

1 - Remove a File Set
2 - Remove a Document from a File Set
3 - Remove a File from a Document
4 - Renumber Files in a Document
5 - Copy a Document to a File Set
6 - Modify the Source System Identification
7 - Modify a File Set Description
8 - List File Sets and Documents
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 5.6.1-2 Source System Identification Modified Screen

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HOUSEKEEPING MENU

5.6.2 Management Information

If the user enters any value other than a 'Y', the function is cancelled and the HOUSEKEEPING MENU is redisplayed. The user may enter any

value for the new Source System Identification without generating an error. The value is stored in the Source System Definition file ("SRCSYS.DEF") located in the TAPETOOL directory.

5.7 Modify a File Set Description

Once the user has entered a '7' while in the HOUSEKEEPING MENU (see Section 5.0), the 'Modify a File Set Description' screen is displayed (see Figure 5.7-1). The 'Modify a File Set Description' option was briefly explained in Section 5.0. If there are no File Sets in the TAPETOOL directory, a message is displayed indicating: "there

are no File Sets" and the HOUSEKEEPING MENU is redisplayed. If there is only one File Set in the TAPETOOL directory, it is automatically chosen as the File Set to be used and a prompt to confirm modifying the File Set description is displayed.

```
+++++
FOR WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.7-1 Modify a File Set Description Screen

5.7.1 Control Inputs

The user enters a number from 1 to the total number of File Sets created (in this example, it is 4), or a 'D' to display the list of File Sets. When the

user enters a valid File Set number (in this example, it is 1), then the screen illustrated in Figure 5.7.1-1 is displayed. If the user enters a carriage return, the HOUSEKEEPING MENU is redisplayed.

TAPETOOL USERS MANUAL

HOUSEKEEPING MENU

```
+++++
FOR WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

The current default File Set description is:
File Set 1

Enter 'Y' to modify this record or RETURN for no modifications =>
+++++
```

Figure 5.7.1-1 Modify Selected File Set Description Screen

Once the user has entered a valid File Set number and the 'Modify Selected File Set Description' screen is displayed, the user may cancel this function by entering a carriage return and the HOUSEKEEPING MENU is redisplayed. If the

user enters a 'Y', then a prompt to enter a new File Set description is displayed. Once the user enters the new File Set description, the HOUSEKEEPING MENU is redisplayed (see Figure 5.7.-1-2).

```
+++++
FOR WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 4

The current default File Set description is:
Target File Set

Enter 'Y' to modify this record or RETURN for no modifications => Y

Please enter a new default value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
Test File Set

Enter continuation of current 60 character record input,
or press RETURN to complete =>

=====
HOUSEKEEPING MENU

1 - Remove a File Set
2 - Remove a Document from a File Set
3 - Remove a File from a Document
4 - Renumber Files in a Document
5 - Copy a Document to a File Set
6 - Modify the Source System Identification
7 - Modify a File Set Description
8 - List File Sets and Documents

9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 5.7.1-2 Enter New File Set Description Screen

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HOUSEKEEPING MENU

5.7.2 Management Information

If the user enters a number outside the range of total File Sets, an error message is displayed and the 'Enter a File Set number' prompt is redis-

played. If the user enters any value other than a 'Y' at the confirm modify prompt, the function is cancelled and the HOUSEKEEPING MENU is redisplayed. If the user is entering a new File Set description, any response is valid.

5.8 List File Sets and Documents

Once the user has entered an '8' while in the HOUSEKEEPING MENU (see Section 5.0), the 'List File Sets and Documents' screen is displayed (see Figure 5.8-1). The 'List File Sets and Documents' option was briefly explained in Section

5.0. If there are no File Sets in the TAPETOOL directory, a message is displayed indicating: "there are no File Sets" and the HOUSEKEEPING MENU is redisplayed.

```
+++++
List of current File Set directories:

Set      Description
-----
SET001   File Set 1
SET002   File Set 2
SET003   File Set 3
SET004   Test File Set

Enter a File Set number, 1..4
(i.e., 2 for set002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 5.8-1 List File Sets and Documents Screen

5.8.1 Control Inputs

The user enters a number from 1 to the total number of File Sets created (in this example, it is 4). If the user enters a valid File Set number (in this example, it is 1), then the 'srcdocid' field of the

Documents within the selected File Set are displayed (see Figure 5.8.1-1). If the user enters a 'D', the list of File Sets is redisplayed. If the user enters a carriage return, the HOUSEKEEPING MENU is redisplayed.

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HOUSEKEEPING MENU

```
+++++
List of current File Set directories:

Set      Description
-----
SET001   File Set 1
SET002   File Set 2
SET003   File Set 3
SET004   Test File Set

Enter a File Set number, 1..4
(i.e., 2 for set002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

List of current Document Declaration directories:

DDF      Title from srcdocid field
-----
D001     TEST DOCUMENT 1
D002     TEST DOCUMENT 2

Press RETURN to continue =>
+++++
```

Figure 5.8.1-1 Display the Documents Screen

5.8.2 Management Information

If the user enters a number outside the range of total File Sets, an error message is displayed and the 'Enter a File Set number' prompt is redisplayed. Once the user selects a valid File Set, the Docu-

ments in the selected File Set are displayed and the prompt 'Press RETURN to Continue' is displayed. Entering any character at the 'Press RETURN to Continue' prompt returns the user to the HOUSEKEEPING MENU.

5.9 Return to the Main Menu

Once the user has entered a '9' while in the HOUSEKEEPING MENU (see Section 5.0), the

MAIN MENU is redisplayed (see Figure 5.9-1).

```
+++++
Enter number followed by a RETURN => 9

=====
MAIN MENU

1 - Housekeeping
2 - Build MIL-STD-1840A Files
3 - Evaluate MIL-STD-1840A Files
4 - Help
5 - Exit program
=====

Enter number followed by a RETURN =>
+++++
```

Figure 5.9-1 Return to the MAIN MENU

TAPETOOL USERS MANUAL

FILE SET MENU

6. FILE SET MENU

Once the user has entered a '2' while in the MAIN MENU (see Section 4.0), the FILE SET MENU is displayed (see Figure 6.0-1). The FILE SET MENU is the primary menu for building File Sets,

Documents, and document files. It is also used to create 9-track tapes in accordance with MIL-STD-1840A. Each of the FILE SET MENU options is described below.

```
+++++
=====
FILE SET MENU

1 - Modify a Header File          8 - Merge Header Files with Data
2 - Modify a Map File            9 - Copy File Set to 9-Track Tape
3 - Modify a Destination System Id 10 - Merge and Copy to 9-Track Tape
4 - Create a New File Set        11 - Examine/Print Header Eval. Log
5 - Create a New Document        12 - Examine/Print Merge Process Log
6 - Add a New File to a Document 13 - Examine/Print Tape Export Log
7 - Evaluate File Set Header Records 14 - Return to the Main Menu
=====
Enter number followed by a RETURN =>
+++++
```

Figure 6.0-1 FILE SET MENU

1 - Modify a Header File provides the ability to make corrections or changes to MIL-STD-1840A Header Records granting access to them. A prompt is given for the File Set and the Document containing the Header Files for that Document. Then the HEADER MENU will be displayed. (See Section 6.1)

2 - Modify a Map File includes a prompt for a file specification that indicates the location and existence of the data for a Data File. The prompt allows the specification to remain blank since the file may not exist yet. The Map File must be complete and accurate for the 'Merge Header Files with Data' step to execute successfully. (See Section 6.2)

This option will allow the modification of Map Records for a specific Document. A prompt is given for a File Set and a Document containing the Map File for a Document. Once a Map Data File is selected successfully, the Map Records will be displayed and a prompt will be issued for the number of the Map Record to modify. A list of the Map

Records can be obtained by entering a 'D'. The Map Record modification process can be exited by entering an 'E'. If any Map Records were modified the option to save or dispose of changes will be given. Only the file specification for the data can be changed.

3 - Modify a Destination System Identification provides the ability to enter the Destination System Identification from this function or whenever it is needed and not defined. According to MIL-STD-1840A, this character string should include the name, address, and other information needed to identify the system to which the Document is going. (See Section 6.3)

4 - Create a New File Set includes a prompt for a file specification that indicates the location and existence of the data for a Data File. The prompt allows the specification to remain blank since the file may not exist yet. The Map File must be complete and accurate for the 'Merge Header Files with Data'

TAPETOOL USERS MANUAL

FILE SET MENU

step to execute successfully. (See Section 6.4)

This option will create a new File Set Directory and issue a prompt for a File Set description. Then a prompt will be issued for the number of Documents to interchange in the File Set. The following information will be requested for each Document: Source Document Id, Destination Document Id, Destination System, and the number of each Type of Data File to create. Each Data File Header Record is created with predefined defaults that, for the most part, will pass the evaluation. As they are created, a prompt is issued for the exact file location of the data that will be appended to it, in the 'Merge Header Files with Data' step. After all Data File Header Records have been created, the DDF File Header Records will be displayed and the opportunity will be presented to modify them.

5 - Create a New Document includes a prompt for a file specification that indicates the location and existence of the data for a Data File. The prompt allows the specification to remain blank since the file may not exist yet. The Map File must be complete and accurate for the 'Merge Header Files with Data' step to execute successfully. (See Section 6.5)

This option will create a new Document in a File Set Directory. A prompt will be issued for a File Set to add the Document, or a 'C' can be entered to create a new File Set Directory. If the 'C' is entered, the function will create a new File Set Directory and issue a prompt for a File Set description.

Once a File Set has been selected, a prompt will be issued for the number of Documents to interchange in the File Set. The following information will be requested for each Document: Source Document Id, Destination Document Id, Destination System, and the number of each Type of Data File to create. Each Data File Header Record is created with predefined defaults that, for the most part, will pass the

evaluation. As they are created, a prompt is issued for the exact file location of the data that will be appended to it in the 'Merge Header Files with Data' step. After all of the Data File Header Records have been created, the DDF File Header Records will be displayed and the opportunity will be presented to modify them.

6 - Add a New File to a Document includes a prompt for a file specification, that indicates the location and existence of the data, for a Data File. The prompt allows the specification to remain blank since the file may not exist yet. The Map File must be complete and accurate for the 'Merge Header Files with Data' step to execute successfully. (See Section 6.6)

This option will create a new Data File in a Document. A prompt will be issued for a File Set and Document into which the Data File should be added. Then a prompt will be issued for a Data File Type. The Data File Header Record will be created with predefined defaults that, for the most part, will pass the evaluation. As it is created, a prompt is issued for the exact file location of the data that will be appended to it in the 'Merge Header Files with Data' step. After the Data File Header Records are created, the Data File Header Records will be displayed and the opportunity will be presented to modify them.

7 - Evaluate File Set Header Records. This function is useful for assuring that a File Set is reasonably fit to interchange. A prompt is given for a File Set to evaluate. The File Set Evaluation function will proceed through each Document. Header Records will be evaluated, the file naming conventions will be evaluated, and the 'filcnt:' field of the Document Declaration File will be checked. Some simple syntax errors will be corrected automatically. Error messages will be issued in the Header Evaluation Log file whenever necessary. (See Section 6.7)

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FILE SET MENU

8 - **Merge Header Files with Data** provides the ability to merge header files with the data. The Map File must be complete and accurate for this step to execute successfully. The first line must always contain the name of the Document Declaration File.

All of the remaining lines must contain the name of each Document Data File (named according to the MIL-STD-1840A file naming conventions) followed by a blank and the complete file specification of a file containing the data. The file must exist at that location. (See Section 6.8)

******* WARNING *******

Appending files after an evaluation or header modification will actually incorporate corrections and changes so that they will be ready to copy the File Set to the 9-track tape. There is no way to recover the original files once it has been completed.

******* WARNING *******

Before copying a File Set to a 9-track tape, the data file must be appended to the header record file creating a third file containing both. The Map File is used as a reference. A prompt will be issued for the File Set containing files to append.

9 - **Copy File Set to 9-Track Tape** automatically copies a File Set onto a 9-track tape in accordance with MIL-STD-1840A and ANSI X3.27. First, a prompt will be given for a File Set to copy. Then a prompt will be given for a Tape Volume Id. The Tape Volume Id must be six ASCII characters according to ANSI X3.4. The first character must be a letter followed by three alphanumeric characters. The Tape volume label must contain a tape number. The Tape number should be represented by '01' as the 5th and 6th characters. (For the VMS version of TAPETOOL, once a tape volume label is entered, the user will be prompted to enter a value for a Tape Density. Legal Tape Density values are 1600 or 6250.) The target tape must be loaded on the predefined tape drive for this procedure to continue. If the tape is not loaded or the drive is allocated by another user, then the operation should be cancelled. Press RETURN to continue or enter any other char-

acter to cancel. (See Section 6.9)

10 - **Merge and Copy to 9-Track Tape** combines the operations of options 8 (Merge Header Files with Data) and 9 (Copy File Set to 9-Track Tape). The user is prompted to select a File Set. Once a valid File Set is entered, the software performs a Merge on all Documents within that File Set. Upon completion of the Merge operation, the Copy File Set to 9-Track Tape function is initiated. (See Section 6.10)

11 - **Examine/Print the Header Evaluation Log** displays the Header Evaluation Log file on the terminal screen. The Header Evaluation Log file is created each time a File Set is evaluated. Before the termination of this function, the log file may be printed on a predefined print device. (See Section 6.11)

12 - **Examine/Print the Merge Process Log** displays the Merge Process Log file on the terminal screen. The Merge Process Log file is created each time a File Set is merged. Before the termination of this function, the log file may be printed on a predefined print device. (See Section 6.12)

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FILE SET MENU

13 - **Examine/Print the Tape Export Log** displays the Tape Export Log file on the terminal screen. The Tape Export Log file is created each time a tape is created. Before the termination of this function, the log file may be printed on a predefined print device. (See Section 6.13)

14 - **Return to the Main Menu** returns control to the MAIN MENU for further instructions. (See

Section 6.14)

If the user enters any value other than defined above or a carriage return, an error message indicating an invalid response is printed on the screen and the FILE SET MENU is redisplayed. If the user enters a carriage return, an error message indicating the lack of a valid response is displayed and the FILE SET MENU is redisplayed.

6.1 Modify a Header File

Once the user has entered a '1' while in the FILE SET MENU (see Section 6.0), the 'Modify a Header File' screen is displayed (see Figure 6.1-1). The 'Modify a Header File' option was briefly explained in Section 6.0. If there are no File Sets residing in the TAPETOOL directory, a message stat-

ing that there are no File Sets is displayed and the FILE SET MENU is redisplayed. If there is only one File Set residing in the TAPETOOL directory, a message is displayed indicating that and the user is prompted to enter the desired Document number.

```
+++++
MODIFY HEADER FILES FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.1-1 Modify a Header File Screen

6.1.1 Control Inputs

If the user enters a valid File Set number, then the prompt to enter a Document number is displayed (see Figure 6.1.1-1). If the user enters a 'D', the list of File Sets in the TAPETOOL directory is displayed. If the user enters the user enters a 'D', the

list of File Sets in the TAPETOOL directory is displayed. If the user enters a valid File Set number but there are no Documents within that File Set, a message is displayed indicating this condition and the FILE SET MENU is redisplayed. If the user enters a carriage return, the FILE SET MENU is redisplayed.

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FILE SET MENU

```
*****
MODIFY HEADER FILES FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

MODIFY HEADER FILES IN WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>
*****
```

Figure 6.1.1-1 Modify Header File Prompt

Once a valid File Set number is entered, the user enters a Document number. If the list of Documents within the selected File Set is desired, the user enters a 'D'. If the user desires to cancel this function at this point, a carriage return is entered and the

FILE SET MENU is redisplayed. Once the user enters a valid Document number, the HEADER MENU is displayed (see Figure 6.1.1-2). The HEADER MENU options are explained in the following subsection.

```
*****
=====
HEADER MENU (SET001/D001 - filcnt: R1)

1 - CGM File Header
2 - DTD File Header
3 - Output Specification File Header
4 - PDL File Header
5 - IGES File Header
6 - Raster File Header
7 - Text File Header
8 - Special Word File Header
9 - Grey Scale File Header
10 - Document Declaration File Header
11 - Verify/Correct the File Count (filcnt) Field
12 - Return to the File Set Menu
13 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
*****
```

Figure 6.1.1-2 HEADER MENU

1 - CGM File Header allows the modification of CGM Header Records for a specific CGM Data File. A prompt will be issued for the number of a CGM Data File to modify. A list of CGM Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once a CGM Data File is selected success-

fully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given.

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FILE SET MENU

Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

2 - DTD File Header allows the modification of DTD Header Records for a specific DTD Data File. A prompt will be issued for the number of a DTD Data File to modify. A list of DTD Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once a DTD Data File is selected successfully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given. Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

3 - Output Specification (OS) File Header allows the modification of OS Header Records for a specific OS Data File. A prompt will be issued for the number of an OS Data File to modify. A list of OS Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once an OS Data File is selected successfully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given. Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

4 - PDL File Header allows the modification of PDL Header Records for a specific PDL Data File. A prompt will be issued for the number of a PDL Data File to modify. A list of PDL Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once

a PDL Data File is selected successfully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given. Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

5 - IGES File Header allows the modification of IGES Header Records for a specific IGES Data File. A prompt will be issued for the number of an IGES Data File to modify. A list of IGES Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once an IGES Data File is selected successfully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified, the option to save or dispose of changes will be given. Some key Header Records internally cannot be modified. Any Header Record selected will be evaluated.

6 - Raster File Header allows the modification of Raster Header Records for a specific Raster Data File. A prompt will be issued for the number of a Raster Data File to modify. A list of Raster Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once a Raster Data File is selected successfully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given. Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

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FILE SET MENU

7 - Text File Header allows the modification of Text Header Records for a specific Text Data File. A prompt will be issued for the number of a Text Data File to modify. A list of Text Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once a Text Data File is selected successfully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given. Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

8 - Special Word File Header allows the modification of Special Word Header Records for a specific Special Word Data File. A prompt will be issued for the number of a Special Word Data File to modify. A list of Special Word Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once a Special Word Data File is selected successfully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given. Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

9 - Grey Scale File Header allows the modification of Grey Scale Header Records for a specific Grey Scale Data File. A prompt will be issued for the number of a Grey Scale Data File to modify. A list of Grey Scale Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once a Grey Scale Data File is selected successfully, the Header Records will be

displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given. Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

10 - Document Declaration File Header allows the modification of DDF Header Records for a specific DDF Data File. A prompt will be issued for the number of a DDF Data File to modify. A list of DDF Data Files can be obtained by entering a 'D'. The file selection process can be exited by entering a RETURN. Once a DDF Data File is selected successfully, the Header Records will be displayed and a prompt will be issued for the number of the Header Record to modify. A list of the Header Records can be obtained by entering a 'D'. The Header Record modification process can be exited by entering an 'E'. If any Header Records were modified the option to save or dispose of changes will be given. Some key Header Records generated internally cannot be modified. Any Header Record selected will be evaluated.

11 - Verify/Correct the File Count (filcnt) Field verifies whether the 'filcnt:' field can be parsed, and whether it reflects the actual number of each type of file in the Document. If it is incorrect the value of the 'filcnt:' field will be corrected automatically. Only an error message summary will be issued after it is completed.

12 - Return to the File Set Menu returns control to the FILE SET MENU for further instructions.

13 - Return to the Main Menu returns control to the MAIN MENU for further instructions.

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FILE SET MENU

6.1.2 Restrictions

Some key Header Records generated internally cannot be modified.

The 'srcsys:' record may not be modified in the Document Declaration File. Use 'Modify the Source System Identification' function.

The 'dstsys:' record may not be modified in the Document Declaration File. Use 'Modify the Destination System Identification' function.

The 'dtetrn:' record may not be modified in the Document Declaration File. It is automatically supplied when the tape is created.

The 'filcnt:' record may not be modified in the Document Declaration File. Use the 'Verify/Correct the File Count (filcnt) Field', 'Add a New File to a Document' or the 'Remove File from a Document' function.

The 'srcdocid:' and 'dstdocid:' records may only be modified in the Document Declaration File.

Each record will be evaluated as it is modified.

Some simple syntax errors will be corrected automatically.

6.1.3 Control Inputs

HEADER MENU options 1 through 10 perform the same function but on different types of header files (e.g., Document Declaration Files); therefore only one example is discussed in this manual. Once the HEADER MENU is displayed, if the user desires to modify the DTD header file, a '2' is entered. If in this manual. Once the HEADER MENU is displayed, if the user desires to modify the DTD header file, a '2' is entered. If there are no DTD header files, a message is displayed indicating there are no DTD files and the HEADER MENU is redisplayed. Once the user enters the menu option of the type of header file to modify, a prompt is given to enter which header file of the selected type to modify (see Figure 6.1.3-1). If the user desires to see a list of the header files of the selected type, a 'D' is entered and a list is displayed followed by the same prompt. If the user decides to cancel this function, a carriage return is entered and the HEADER MENU is redisplayed.

```
+++++
Enter the number of the CGM Header File to be modified
(i.e., 11 for D001C011, do not use system notation),
'D' to display list of files or press RETURN to cancel =>
+++++
```

Figure 6.1.3-1 Enter Which Header File To Modify Prompt

Once the user selects which header file to modify, a prompt is displayed that will allow the user to specify the following: which header record to modify, to display the file contents, to print the file contents, or to exit the function (see Figure 6.1.- 3-2). If the user needs to modify a header record, the number of the header record is entered (e.g., '7'). When the

header record number is entered, the current value of the selected header record is displayed and a request for the new value is given (see Figure 6.1.- 3-3). If the user decides to cancel the function at this point, a carriage return is entered and the HEADER MENU is redisplayed.

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FILE SET MENU

```
+++++
=====
File name: D001C001; CGM File contents:

1 srcdocid: Test
2 dstdocid: Test
3 txtfilid: NONE
4 figid: NONE
5 srcgph: NONE
6 doccls: UNCLASSIFIED
7 notes: NONE
=====

1..7 - number of a record to modify, d - display file contents,
p - print file contents, e - exit =>
+++++
```

Figure 6.1.3-2 Modify Which Header Record Screen

```
+++++
=====
File name: D001C001; CGM File contents:

1 srcdocid: Test
2 dstdocid: Test
3 txtfilid: NONE
4 figid: NONE
5 srcgph: NONE
6 doccls: UNCLASSIFIED
7 notes: NONE
=====

1..7 - number of a record to modify, d - display file contents,
p - print file contents, e - exit => 7

Record 7 has the following value:
notes: NONE

Enter the new value for this record
(maximum record size = 80), or press RETURN to cancel =>
notes:
+++++
```

Figure 6.1.3-3 Enter New Header Record Value Screen

Once the user enters a new value for the selected header record, control is returned to the 'Modify Which Header Record' screen (see Figure 6.1.3-4). If the user wants a list of the header records (file contents), of the selected header file, a 'D' is entered (see Figure 6.1.3-5). If the user wants a printed listing of the header records (file contents), of the selected file, a 'P' is entered. The print job is queued to the printer and then control is returned to

the 'Modify Which Header Record' screen. Once the user decides to exit this function, an 'E' is entered. At this point, the user is requested to save or cancel the modifications (see Figure 6.1.3-6). If the user desires to save the modifications, a carriage return is entered. If the user desires not to save the modifications, any other character may be entered. Control is returned to the HEADER MENU.

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FILE SET MENU

```
+++++
Record 7 has the following value:
notes: NONE

Enter the new value for this record
(maximum record size = 80), or press RETURN to cancel =>
notes: This is the CGM notes header record.

Enter continuation of current 80 character record input,
or press RETURN to complete =>

1..7 - number of a record to modify, d - display file contents,
p - print file contents, e - exit =>
+++++
```

Figure 6.1.3-4 New Selected Header Record Value Entered Screen

```
+++++
1..7 - number of a record to modify, d - display file contents,
p - print file contents, e - exit => D
=====
File name: D001C001; CGM File contents:

1 srcdocid: Test
2 dstdocid: Test
3 txtfilid: NONE
4 figid: NONE
5 srcgph: NONE
6 doccls: UNCLASSIFIED
7 notes: This is the CGM notes header record.
=====

1..7 - number of a record to modify, d - display file contents,
p - print file contents, e - exit =>
+++++
```

Figure 6.1.3-5 Display Of the File Contents Screen

```
+++++
1..7 - number of a record to modify, d - display file contents,
p - print file contents, e - exit => E
*****
Press RETURN to SAVE previous modifications and any other character for NOSAVE:
*****
+++++
```

Figure 6.1.3-6 Exit The Modify Header Function Screen

If the user desires to verify the file count, an '11' is entered while in the HEADER MENU. A message is displayed indicating that the file count is being checked, a message indicating the status of the file

count is displayed, and control is returned to the HEADER MENU (see Figure 6.1.3-7). If the file count is not correct, it will be corrected automatically.

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
Enter number followed by a RETURN => 11

Checking file count...
No errors were encountered during file count verification.
File Count verification complete.

=====
HEADER MENU (SET003/D001 - filcnt: C2)

1 - CGM File Header
2 - DTD File Header
3 - Output Specification File Header
4 - PDL File Header
5 - IGES File Header
6 - Raster File Header
7 - Text File Header
8 - Special Word File Header
9 - Grey Scale File Header
10 - Document Declaration File Header
11 - Verify/Correct the File Count (filcnt) Field
12 - Return to the File Set Menu
13 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 6.1.3-7 Verify The File Count Screen

If the user desires to return to the FILE SET MENU, a '12' is entered and control is returned to the FILE SET MENU (refer to Section 6.0). If the user desires to return to the MAIN MENU, a '13' is entered and control is returned to the MAIN MENU (refer to Section 4.0).

6.1.4 Management Information

While in the 'Modify a Header File' prompt, if the user enters a File Set number that is outside the range of total File Sets, an error message is displayed and the 'Enter a File Set number' prompt is redisplayed. Once the user enters a valid File Set number, a valid Document number is requested. If the user enters a Document number outside the range of total Documents, an error message is displayed and the 'Enter a Document number' prompt

is redisplayed. Once control is with the HEADER MENU, if the user enters an input that is outside the number of menu options, a message is displayed indicating the error and the HEADER MENU is redisplayed. If the user enters a carriage return, an error message is displayed indicating the lack of input and the HEADER MENU is redisplayed. Once the user enters a valid HEADER MENU option, the 'Enter a Header File Number' prompt is displayed. If the user enters a number that is outside the range of the selected header files, an error message is displayed and control is returned to the prompt (see Figure 6.1.4-1). Once the user enters a valid HEADER MENU option they are prompted for the following: the number of the header record to modify, to display the file contents, to print the file contents, or to exit the function. If any input other than the specified input is entered, an error message is displayed and the prompt is redisplayed.

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FILE SET MENU

```
*****
Enter the number of the CGM Header File to be modified
(i.e., 11 for D001C011, do not use system notation),
'D' to display list of files or press RETURN to cancel => 3

*** ERROR - D001C003 does not exist, please try again.

Enter the number of the CGM Header File to be modified
(i.e., 11 for D001C011, do not use system notation),
'D' to display list of files or press RETURN to cancel =>

*****
```

Figure 6.1.4-1 Invalid Header File Value Error Message

6.2 Modify a Map File

Once the user has entered a '2' while in the FILE SET MENU (see Section 6.0), the 'Modify a Map File' screen is displayed (see Figure 6.2-1). The 'Modify a Map File' option was briefly explained in Section 6.0. If there are no File Sets residing in the TAPETOOL directory, a message stating that there

are no File Sets is displayed and the FILE SET MENU is redisplayed. If there is only one File Set residing in the TAPETOOL directory, a message is displayed indicating that and the user is prompted to enter the desired Document number.

```
*****
MODIFY MAP FILE IN WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

*****
```

Figure 6.2-1 Modify Map File Screen

6.2.1 Control Inputs

If the user enters a valid File Set number, the prompt to enter a Document number is displayed (see Figure 6.2.- 1-1). If the user desires to see a

list of the available File Sets, a 'D' is entered. The list of File Sets is displayed and the prompt is redisplayed. If the user decides to cancel this function, a carriage return is entered and the FILE SET MENU is redisplayed.

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FILE SET MENU

```
+++++
MODIFY MAP FILE IN WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

MODIFY MAP FILE FOR WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.2.1-1 Enter a Document Number Screen

Once the user enters a valid Document number, the following prompt is displayed to enter the desired record to modify, to display the file contents, to print the file contents, or to exit the function (see Figure 6.2.1-2). If the user needs a listing of the

available Documents within the selected File Set, a 'D' is entered. The list of Documents is displayed and the prompt is redisplayed. If the user decides to cancel this function, a carriage return is entered.

```
+++++
=====
File name: MAP.LIS; Map File contents:

1 D001
2 D001C001 C:\DATA\FILE1.CGM
3 D001C002 C:\DATA\FILE2.CGM
=====

1..3 - number of a record to modify, d - display file contents,
p - print file contents, e - exit =>

+++++
```

Figure 6.2.1-2 Modify Which Map Record Screen

Once the user is in the 'Modify a Map Record' screen, the prompts operate like the modifying of the header records from the previous section (refer to Section 6.1.1). Once the user has completed this function, enter an 'E' to exit. If the user made modifications to the map file, a prompt is displayed to save or not save the modifications. If the user wants to save the modifications, a carriage return is entered. If the user decides not to save the modifications, any keyboard character is entered. Control is returned to the FILE SET MENU.

6.2.2 Management Information

While in the 'Modify a Map File' prompt, if the user enters a File Set number that is outside the range of total File Sets, an error message is displayed and the 'Enter a File Set number' prompt is redisplayed. Once the user enters a valid File Set number, a valid Document number is requested. If the user enters a Document number outside the range of total Documents, an error message is displayed and the 'Enter a Document number' prompt is redisplayed. Once the user enters a valid Document number they are prompted for the following:

TAPETOOL USERS MANUAL

FILE SET MENU

the number of the map record to modify, to display the file contents, to print the file contents, or to exit the function. If any input other than the specified input is entered, an error message is displayed and the prompt is redisplayed. Once the user has selected the File Set, Document, and map record to modify,

the user will be prompted for a new file name (see Figure 6.2.2-1). If the system cannot find the file name entered by the user, an error message will be displayed (see Figure 6.2.2-2). The map records are stored in a map file ("MAP.LIS") located in each of the File Set directories.

```
+++++
=====
File name: MAP.LIS; Map File contents:

1 D001
2 D001C001 C:\DATA\FILE1.CGM
3 D001C002 C:\DATA\FILE2.CGM
=====

1..3 - number of a record to modify, d - display file contents,
p - print file contents, e - exit => 3

Record 3 has the following value:
D001C002 C:\DATA\FILE2.CGM

Enter the full file specification for corresponding data file
or press RETURN to leave it blank:
C:\DATA\NEWFILE.CGM

1..3 - number of a record to modify, d - display file contents,
p - print file contents, e - exit =>
+++++
```

Figure 6.2.2-1 Modify a Map File Screen

```
+++++
=====
File name: MAP.LIS; Map File contents:

1 D001
2 D001C001 C:\DATA\FILE1.CGM
3 D001C002 C:\DATA\FILE2.CGM
=====

1..3 - number of a record to modify, d - display file contents,
p - print file contents, e - exit => 3

Record 3 has the following value:
D001C002 C:\DATA\FILE2.CGM

Enter the full file specification for corresponding data file
or press RETURN to leave it blank:
C:\DATA\FILE2A.CGM

*** DOS I/O ERROR (open_file/open) - : No such file or directory
C:\DATA\FILE2A.CGM

Enter the full file specification for corresponding data file
or press RETURN to leave it blank:
+++++
```

Figure 6.2.2-2 Modify a Map File Error Screen

6.3 Modify a Destination System Identification

Once the user has entered a '3' while in the FILE SET MENU (see Section 6.0), the 'Modify a Destination System Identification' screen is displayed (see Figure 6.3-1). The 'Modify a Destination System Identification' option was briefly explained in Section 6.0. If there are no File Sets residing in the TAPETOOL directory, a message stating that there

are no File Sets is displayed and the FILE SET MENU is redisplayed. If there is only one File Set residing in the TAPETOOL directory, a message is displayed indicating that and the user is prompted to confirm modification of the Destination System Identification.

```
+++++  
FOR WHICH FILE SET?...  
  
Enter a File Set number, 1..4  
(i.e., 2 for SET002, do not use system notation).  
Enter 'D' to display or press RETURN to cancel =>  
+++++
```

Figure 6.3-1 Enter a File Set Number Screen

6.3.1 Control Inputs

If the user enters a valid File Set number, a prompt to confirm modification of the played (see Figure 6.3.1-1). If the user desires to see a list of the available File Sets, a 'D' is entered. The list of File Sets is displayed and the prompt is redisplayed. If the user decides not to modify the Destination System Identification, entering a carriage return cancels

this function and the FILE SET MENU is redisplayed. If the user enters a 'Y', then the prompt to enter a new Destination System Identification value is displayed (see Figure 6.3.1-2). The user may modify the Destination System Identification by entering a new value or may cancel the function by entering a carriage return. The system indicates that it is modifying the Destination System value and control returns to the FILE SET MENU (see Figure 6.3.1-3).

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
FOR WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

The current default value of destination system is:
dstsys: CALS Test Bed

Enter 'Y' to modify this record or RETURN for no modifications =>
```

Figure 6.3.1-1 Enter Confirmation Screen

```
+++++
FOR WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

The current default value of destination system is:
dstsys: CALS Test Bed

Enter 'Y' to modify this record or RETURN for no modifications => Y

Enter a value for the 'dstsys: ' field for Document D001
(maximum record size = 256), or press RETURN to cancel =>
dstsys:
```

Figure 6.3.1-2 Enter New Destination System Identification Value Screen

TAPETOOL USERS MANUAL

FILE SET MENU

```
*****
FOR WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

The current default value of destination system is:
dstsys: CALS Test Bed

Enter 'Y' to modify this record or RETURN for no modifications => Y

Enter a value for the 'dstsys: ' field for Document D001
(maximum record size = 256), or press RETURN to cancel =>
dstsys: AF CALS TEST BED, Dayton OH 45431

Enter continuation of current 256 character record input,
or press RETURN to complete =>

Working...

=====
FILE SET MENU

1 - Modify a Header File           8 - Merge Header Files with Data
2 - Modify a Map File              9 - Copy File Set to 9-Track Tape
3 - Modify a Destination System Id 10 - Merge and Copy to 9-Track Tape
4 - Create a New File Set          11 - Examine/Print Header Eval. Log
5 - Create a New Document          12 - Examine/Print Merge Process Log
6 - Add a New File to a Document   13 - Examine/Print Tape Export Log
7 - Evaluate File Set Header Records 14 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
*****
```

Figure 6.3.1-3 A New Destination System Identification Screen

6.3.2 Management Information

While in the 'Modify a Destination System Identification' prompt, if the user enters a File Set number that is outside the range of total File Sets, an error message is displayed and the 'Modify a Destination

System Identification' prompt is redisplayed. Once the user enters a valid File Set number and the confirmation screen to modify the Destination System value is displayed, entering any value other than a 'Y' causes control to be returned to the FILE SET MENU. Any input may be given to the 'dstsys' value without generating an error.

6.4 Create a New File Set

Once the user has entered a '4' while in the FILE SET MENU (see Section 6.0), the first part of the 'Create a New File Set' screen is displayed (see

Figure 6.4-1). The 'Create a New File Set' option was briefly explained in Section 6.0. The user responds to numerous prompts to create the new File

TAPETOOL USERS MANUAL

FILE SET MENU

Set. These prompts are explained in the following subsection. The new File Set is given a name that is one greater than the previous File Set. For exam-

ple, if SET001 already exists and a new File Set is created, it is given the name SET002.

```
+++++
Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
+++++
```

Figure 6.4-1 Create A New File Set

6.4.1 Control Inputs

The user is prompted for all of the needed information to create a new File Set. The user responds to all of the prompts with the desired information. The user may cancel this function at any prompt by entering a carriage return. Figure 6.4.1-1 illustrates all of the prompts displayed to create a new File Set.

The user has the option to modify most of the header records contained in the Document Declaration File for the new File Set. For more informa-

tion on modifying the header records, refer to Section 6.1. When the user is finished with any modifications, an 'E' is entered. The user will then be prompted to enter the directory and file specification for each of the file types and file counts previously entered. For example, if the user entered 'R' (Raster file type) '1' (# Raster files) and 'T' (Text file type) '1' (# Text files), there would be two prompts - one for the Raster data file specification and one for the Text data file specification. After responding to all file specification prompts, the FILE SET MENU is redisplayed.

```
+++++
Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
USER MANUAL

Enter continuation of current 60 character record input,
or press RETURN to complete =>

Please enter the number of Documents to be transferred to tape.
Press RETURN to cancel => 1

The following Document Declaration fields must be entered now:

Enter a value for the 'srcdocid: ' field for Document D001
(maximum record size = 256), or press RETURN to cancel =>
srcdocid: TAPETOOL USER MANUAL

Enter continuation of current 256 character record input,
or press RETURN to complete =>

Enter a value for the 'dstdocid: ' field for Document D001
(maximum record size = 256), or press RETURN to cancel =>
dstdocid: TAPETOOL USER MANUAL

Enter continuation of current 256 character record input,
or press RETURN to complete =>

Enter a value for the 'dstsys: ' field for Document D001
(maximum record size = 256), or press RETURN to cancel =>
```

TAPETOOL USERS MANUAL

FILE SET MENU

dstsys: CALS Test Bed

Enter continuation of current 256 character record input,
or press RETURN to complete =>

Building a count of files for Document D001...
Enter a file type, 'EXIT' to complete, 'QUIT' to abort,
or 'D' to display the file counts => R

Enter the number of Raster Files => 1

Enter a file type, 'EXIT' to complete, 'QUIT' to abort,
or 'D' to display the file counts => EXIT

=====

File name: D001; Document Declaration File contents:

1 srcsys: CALS Test Bed
2 srcdocid: TAPETOOL USER MANUAL
3 srcrelid: NONE
4 chglvl: ORIGINAL
5 dteisu: 19930624
6 dstsys: CALS Test Bed
7 dstdocid: TAPETOOL USER MANUAL
8 dstrelid: NONE
9 dtetrn: 19930624
10 dlvac: NONE
11 filcnt: R1
12 ttlcls: UNCLASSIFIED
13 doccls: UNCLASSIFIED
14 doctyp: Product Data
15 docttl: NONE

=====

1..15 - number of a record to modify, d - display file contents,
p - print file contents, e - exit => E

Raster Header File name: D001R001

Enter the full file specification for corresponding data file
or press RETURN to leave it blank:
C:\DATA\FILE1.GR4

=====

FILE SET MENU

- | | |
|--------------------------------------|--------------------------------------|
| 1 - Modify a Header File | 8 - Merge Header Files with Data |
| 2 - Modify a Map File | 9 - Copy File Set to 9-Track Tape |
| 3 - Modify a Destination System Id | 10 - Merge and Copy to 9-Track Tape |
| 4 - Create a New File Set | 11 - Examine/Print Header Eval. Log |
| 5 - Create a New Document | 12 - Examine/Print Merge Process Log |
| 6 - Add a New File to a Document | 13 - Examine/Print Tape Export Log |
| 7 - Evaluate File Set Header Records | 14 - Return to the Main Menu |
- =====

Enter number followed by a RETURN =>

+++++

Figure 6.4.1-1 Create a New File Set Prompts

TAPETOOL USERS MANUAL

FILE SET MENU

6.4.2 Management Information

The user may enter any value for the File Set description without generating an error. If the user enters any value other than a number from 1 to 300 (current maximum) for the number of Documents to be transferred to tape, an error message is displayed and the prompt is redisplayed. If the user enters a 'D' at the prompt to enter a file type, the current file

counts (and types) are displayed (see Figure 6.4-2-1). If the user enters an 'EXIT' at the prompt to enter a file type, the current file counts will be accepted and the Document Declaration File will be displayed. If the user enters a 'QUIT' at the prompt to enter a file type, the creation of the File Set will be aborted and the FILE SET MENU will be displayed. If the user enters any other input, an error message is generated and the prompt is redisplayed.

```
+++++
Enter a file type, 'EXIT' to complete, 'QUIT' to abort,
or 'D' to display the file counts => D

File Type      Count      Description
-----
C      -      0      -      CGM
G      -      0      -      DTD
H      -      0      -      Output Specification
P      -      0      -      PDL
Q      -      0      -      IGES
R      -      1      -      Raster
T      -      0      -      Text
X      -      0      -      Special Word
Z      -      0      -      Grey Scale

Enter a file type, 'EXIT' to complete, 'QUIT' to abort,
or 'D' to display the file counts =>
+++++
```

Figure 6.4.2-1 Display File Counts Screen

6.5 Create a New Document

Once the user has entered a '5' while in the FILE SET MENU (see Section 6.0), the first part of the 'Create a New Document' screen is displayed (see Figure 6.5-1). The 'Create a New Document' option was briefly explained in Section 6.0. The user responds to numerous prompts to create the new Document. These prompts are explained in the following subsection. The new Document is given a

name that is one greater than the previous Document within the selected File Set. For example, if D001 already exists and a new Document is created, it is given the name D002. If there are no File Sets within the TAPETOOL directory, the user receives the prompts to create a new File Set to create the Document in (refer to Section 6.4). If any File Sets exist, the user may choose one or create a new one.

TAPETOOL USERS MANUAL

FILE SET MENU

```
*****
ADD A DOCUMENT TO WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel =>
*****
```

Figure 6.5-1 Create a New Document Screen

6.5.1 Control Inputs

The user is prompted for all of the needed information to create a new Document. The user responds to all of the prompts with the desired information. The user may cancel this function at any prompt by

entering a carriage return. Figure 6.5.1-1 illustrates all of the prompts displayed to create a new Document. The first piece of information that needs to be entered is which File Set to create the Document in. The user may create a new File Set or specify a File Set that already exists.

```
*****
ADD A DOCUMENT TO WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel => 1

The following Document Declaration fields must be entered now:

Enter a value for the 'srcdocid: ' field for Document D002
(maximum record size = 256), or press RETURN to cancel =>
srcdocid: TEST DOCUMENT 2

Enter continuation of current 256 character record input,
or press RETURN to complete =>

Enter a value for the 'dstdocid: ' field for Document D002
(maximum record size = 256), or press RETURN to cancel =>
srcdocid: TEST DOCUMENT 2

Enter continuation of current 256 character record input,
or press RETURN to complete =>

Building a count of files for Document D002...
Enter a file type, 'EXIT' to complete, 'QUIT' to abort,
or 'D' to display the file counts => R

Enter the number of Raster Files => 1

Enter a file type, 'EXIT' to complete, 'QUIT' to abort,
or 'D' to display the file counts => EXIT
```


TAPETOOL USERS MANUAL

FILE SET MENU

=====

File name: D002; Document Declaration File contents:

1 srcsys: CALS Test Bed
2 srcdocid: TEST DOCUMENT 2
3 srcrelid: NONE
4 chglvl: ORIGINAL
5 dteisu: 19930624
6 dstsys: DS
7 dstdocid: TEST DOCUMENT 2
8 dstrelid: NONE
9 dtetrn: 19930624
10 dlvac: NONE
11 filcnt: R1
12 ttcls: UNCLASSIFIED
13 doccls: UNCLASSIFIED
14 doctyp: Product Data
15 docttl: NONE

=====

1..15 - number of a record to modify, d - display file contents,
p - print file contents, e - exit => E

Raster Header File name: D002R001

Enter the full file specification for corresponding data file
or press RETURN to leave it blank:
C:\DATA\FILE1.GR4

=====

FILE SET MENU

| | |
|--------------------------------------|--------------------------------------|
| 1 - Modify a Header File | 8 - Merge Header Files with Data |
| 2 - Modify a Map File | 9 - Copy File Set to 9-Track Tape |
| 3 - Modify a Destination System Id | 10 - Merge and Copy to 9-Track Tape |
| 4 - Create a New File Set | 11 - Examine/Print Header Eval. Log |
| 5 - Create a New Document | 12 - Examine/Print Merge Process Log |
| 6 - Add a New File to a Document | 13 - Examine/Print Tape Export Log |
| 7 - Evaluate File Set Header Records | 14 - Return to the Main Menu |

=====

Enter number followed by a RETURN =>

+++++

Figure 6.5.1-1 Create a New Document Prompts

The user has the option to modify any of the records contained in the new Document. When the user is finished with any modifications to the Document Declaration File, an 'E' is entered. The user will then be prompted to enter the directory and file specification for each of the file types and file counts previously entered. For example, if the user

entered 'R' (Raster file type) '1' (# Raster files) and 'T' (Text file type) '1' (# Text files), there would be two prompts - one for the Raster data file specification and one for the Text data file specification. After responding to all file specification prompts, the FILE SET MENU is redisplayed.

TAPETOOL USERS MANUAL

FILE SET MENU

6.5.2 Management Information

The user may enter any value for the prompts requesting textual input without generating an error. If the user is prompted with which File Set to create the Document in and a number outside the range of total File Sets is entered, an error message is displayed and the prompt is redisplayed.

While in the prompt to enter a file, type a 'D' to display the possible file types, an 'EXIT' to continue, or a 'QUIT' to cancel the function. Any input other than a valid one generates an error message and the prompt is redisplayed.

6.6 Add a New File to a Document

Once the user has entered a '6' while in the FILE SET MENU (see Section 6.0), the first part of the 'Add a New File to a Document' screen is displayed (see Figure 6.6-1). The 'Add a New File to a Document' option was briefly explained in Section 6.0. The user responds to numerous prompts to add a new file to a Document. These prompts are

explained in the following subsection. The new file is given a name that is one greater than the previous file within the selected Document. For example, if D001R001 already exists and a new Raster data file is added to this Document, it is given the name D001R002.

```
+++++
ADD A FILE TO WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>
+++++
```

Figure 6.6-1 Add a New File To a File Set Prompt

6.6.1 Control Inputs

Once the user enters a valid File Set number, a prompt to enter the desired Document to add the file to is displayed. Once the user enters a valid Document number, the prompt to enter a file type, displayed

the current data files, or to exit this function is displayed (see Figure 6.6.1-1). If the user desires to obtain a list of the current data files, a 'D' is entered (see Figure 6.6.1-2). If the user desires to cancel this function, a carriage return is entered and control returns to the FILE SET MENU.

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
ADD A FILE TO WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

ADD A FILE TO WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

Enter a file type to add (i.e., 'R' for Raster,
do not specify a DDF type). Enter 'D' to display,
'E' to exit =>
```

Figure 6.6.1-1 Enter File Type Prompt

```
+++++
Enter a file type to add (i.e., 'R' for Raster,
do not specify a DDF type). Enter 'D' to display,
'E' to exit => D

List of current data Files:

D001C001
D001R002

Enter a file type to add (i.e., 'R' for Raster,
do not specify a DDF type). Enter 'D' to display,
'E' to exit =>
```

Figure 6.6.1-2 List Of Current Data Files

Once the user enters a file type, a prompt to enter the file specification is displayed. When the file specification is entered, the contents of the header file is displayed and the user has the ability to modify the records, display the records, print the

records, or exit (see Figure 6.6.1-3). This prompt is explained in the previous section (refer to Section 6.5). Once the user completes modifying the new file, control is return to the FILE SET MENU by entering an 'E'.

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
Enter a file type to add (i.e., 'R' for Raster,
do not specify a DDF type). Enter 'D' to display,
'E' to exit => C

CGM Header File name: D001C003

Enter the full file specification for corresponding data file
or press RETURN to leave it blank:
C:\DATA\FILE3.CGM

=====
File name: D001C003; CGM File contents:

1 srcdocid: TEST DOCUMENT 1
2 dstdocid: D
3 txtfilid: NONE
4 figid: NONE
5 srcgph: NONE
6 doccls: UNCLASSIFIED
7 notes: NONE
=====

1..7 - number of a record to modify, d - display file contents,
p - print file contents, e - exit => E
+++++
```

Figure 6.6.1-3 Enter the File Specifics Screen

6.6.2 Management Information

The user may enter any value for the prompts requesting textual input without generating an error. If the user is prompted with which File Set to add the new file to and a number outside the range of total File Sets is entered, an error message is displayed and the prompt is redisplayed. If the user enters a valid File Set number but enters a Document number that is outside the range of total Documents in the selected File Set, an error message is displayed and the prompt is redisplayed. While in the prompt to enter a file, type a 'D' to display the

current files, or an 'EXIT' to quit. Any input other than a valid one generates an error message as illustrated in Figure 6.6.2-1 and the prompt is redisplayed. When prompted to enter the file specification of the new file, if the user enters an invalid file specification, a DOS error is displayed and the prompt is redisplayed (see Figure 6.6.2-2). While in the prompt to enter a record number to modify, type a 'D' to display the file contents, a 'P' to print the file contents, or an 'E' to exit the function. If the user enters any input other than a valid one, an error message is generated and the prompt is redisplayed.

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
Enter a file type to add (i.e., 'R' for Raster,
do not specify a DDF type). Enter 'D' to display,
'E' to exit => W

*** ERROR (MIL-STD-1840A; 5.1.3) - A valid file type was not
found for 'W'.

Enter a file type to add (i.e., 'R' for Raster
do not specify a DDF type). Enter 'D' to display,
'E' to exit =>
+++++
```

Figure 6.6.2-1 Invalid File Type Error Message

```
+++++
Enter a file type to add (i.e., 'R' for Raster,
do not specify a DDF type). Enter 'D' to display,
'E' to exit => C

CGM Header File name: D001C004

Enter the full file specification for corresponding data file
or press RETURN to leave it blank:
C:\DATA\NOEXIST.CGM

*** DOS I/O ERROR (open_file/open) - : No such file or directory
C:\DATA\NOEXIST.CGM

Enter the full file specification for corresponding data file
or press RETURN to leave it blank:
+++++
```

Figure 6.6.2-2 Invalid File Specification Error Message

6.7 Evaluate File Set Header Records

Once the user has entered a '7' while in the FILE SET MENU (see Section 6.0), the first part of the 'Evaluate File Set Header Records' screen is displayed (see Figure 6.7-1). The 'Evaluate File Set Header Records' option was briefly explained in Section 6.0. If there are no File Sets within the

TAPETOOL directory, a message stating this is displayed and control returns to the FILE SET MENU. If there is only one File Set available, it is automatically chosen as the File Set to be used, and it will be evaluated.

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
EVALUATE WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.7-1 Evaluate File Set Screen

6.7.1 Control Inputs

Once the user has selected a File Set to be evaluated, the software evaluates it and then displays any er-

rors, warnings, and notes (see Figure 6.7.- 1-1). Once the File Set is evaluated and the message indicating the results is displayed, control is returned to the FILE SET MENU.

```
+++++
EVALUATE WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)

Working.....

A grand total of 6 error(s), 0 warning(s), and 0 note(s) were
encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

=====
FILE SET MENU

1 - Modify a Header File           8 - Merge Header Files with Data
2 - Modify a Map File              9 - Copy File Set to 9-Track Tape
3 - Modify a Destination System Id 10 - Merge and Copy to 9-Track Tape
4 - Create a New File Set          11 - Examine/Print Header Eval. Log
5 - Create a New Document          12 - Examine/Print Merge Process Log
6 - Add a New File to a Document   13 - Examine/Print Tape Export Log
7 - Evaluate File Set Header Records 14 - Return to the Main Menu

=====

Enter number followed by a RETURN =>

+++++
```

Figure 6.7.1-1 File Set Evaluation Screen

6.7.2 Management Information

If the user enters a File Set number that is outside

the range of total File Sets, an error message is displayed and the prompt is redisplayed. The errors, warnings, and notes found within the selected File Set are discrepancies/inconsistencies based upon

TAPETOOL USERS MANUAL

FILE SET MENU

MIL-STD-1840A, Section 5.0. The results of the evaluation may be reviewed using the 'Examine/Print Header Eval. Log' option from the FILE SET MENU (see Section 6.11). The results

of the evaluation are stored in the Evaluation Log file ("EVALUATE.LOG") located in each of the File Set directories.

6.8 Merge Header File With Data

Once the user has entered a '8' while in the FILE SET MENU (see Section 6.0), the first part of the 'Merge Header File With Data' screen is displayed (see Figure 6.8-1). The 'Merge Header File With Data' option was briefly explained in Section 6.0.

If there are no File Sets within the TAPETOOL directory, a message stating this is displayed and control returns to the FILE SET MENU. If there is only one File Set available, it is automatically chosen as the File Set to be used.

```
+++++
MERGE FILES IN WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.8-1 Merge Header Files With Data Screen

6.8.1 Control Inputs

Once the user enters a valid File Set number, a prompt to enter a Document number is displayed

(see Figure 6.8.- 1-1). Once the user enters a valid Document number, the software attempts to merge the header file with data. In this example, there is an error due to no data files being specified in the MAP.LIS file (see Figure 6.8.1-2).

```
+++++
MERGE FILES IN WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

MERGE FILES FOR WHICH DOCUMENT?...

Enter a Document number, 1..2
(i.e., 2 for D002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.8.1-1 Enter Document Number Screen

TAPETOOL USERS MANUAL

FILE SET MENU

```
*****
MERGE FILES IN WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 2

D001 is all that exists; assumed...

CALS Test Network Merge Process - Version 1.2; Release 10 (C)

      1 file(s) copied

Working....

*** INTERNAL ERROR (merge files) - MAP.LIS has a syntax error.
      A Map File line could not be parsed.

Working...

Merge Process terminated with 1 error(s), 0 warning(s), and 0 note(s).

=====
FILE SET MENU

1 - Modify a Header File           8 - Merge Header Files with Data
2 - Modify a Map File             9 - Copy File Set to 9-Track Tape
3 - Modify a Destination System Id 10 - Merge and Copy to 9-Track Tape
4 - Create a New File Set         11 - Examine/Print Header Eval. Log
5 - Create a New Document         12 - Examine/Print Merge Process Log
6 - Add a New File to a Document  13 - Examine/Print Tape Export Log
7 - Evaluate File Set Header Records 14 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
*****
```

Figure 6.8.1-2 Attempted Merger Of Header File With Data Screen

6.8.2 Management Information

If the user enters a File Set number outside the range of the total File Sets, an error message is displayed and the prompt is redisplayed. If the user enters a valid File Set number but enters a Document number outside the range of total Documents for the

selected File Set, an error message is displayed and the prompt is redisplayed. All operations performed by the 'Merge Header Files With Data' option are written to a Merge Process Log file. The results of the merge may be reviewed using the 'Examine/Print Merge Process Log' option from the FILE SET MENU (see Section 6.12).

6.9 Copy File Set To 9-Track Tape

Once the user has entered a '9' while in the FILE SET MENU (see Section 6.0), the first part of the 'Copy File Set To 9-Track Tape' screen is displayed (see Figure 6.9-1). The 'Copy File Set To 9-Track

Tape' option was briefly explained in Section 6.0. If there are no File Sets within the TAPETOOL directory, a message stating this is displayed and control returns to the FILE SET MENU. If there is

TAPETOOL USERS MANUAL

FILE SET MENU

only one File Set available, it is automatically chosen as the File Set to be used, and then the user is

prompted for a tape label.

```
+++++
BUILD A TAPE FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.9-1 Copy File Set To 9-Track Tape Screen

6.9.1 Control Inputs

Once the user enters a valid File Set number, a prompt to enter a tape volume identification is displayed (see Figure 6.9.1-1). If the user decides to use the default tape volume identification label (i.e., CALS01) a carriage return is entered, otherwise the desired identification is entered. Once a tape volume identification label is entered, a message is given to the user to ensure that the tape is loaded on

the tape drive and a prompt is given for the user to continue the operation or to cancel the operation. If the user decides to continue this function, a carriage return is entered and the software attempts to copy the File Set to tape (see Figure 6.9.1-2). If the operating system cannot find the tape drive or the driver software is not loaded, an error message will be displayed (see Figure 6.9.- 1-3). If the user decides to cancel this function any keyboard input, except a carriage return, is entered and control is returned to the FILE SET MENU.

```
+++++
BUILD A TAPE FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

Enter the 6 character name of the tape volume id.
Press RETURN for CALS01 =>

+++++
```

Figure 6.9.1-1 Enter Tape Volume ID Prompt

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
BUILD A TAPE FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 3

Enter the 6 character name of the tape volume id.
Press RETURN for CALS01 =>

CALS Test Network ANSI Tape Creation Software - Version 1.2; Release 10 (C)

This procedure will automatically copy your data files to tape
in accordance with ANSI X3.27. The target tape must be
loaded on tape drive for this procedure to succeed.

If tape is not loaded or the drive is allocated by another user, then exit.
Press RETURN to continue or enter any other character to cancel =>

Working.....

      1 file(s) copied

Working...

C:\TAPETOOL\SET003\D001\D001.LIS queued to for print.
Name of list device [PRN]:
Resident part of PRINT installed

      C:\TAPETOOL\SET003\D001\D001.LIS is currently being printed

Working...

WRITING FILE => D001

WRITING FILE => D001C001

WRITING FILE => D001C002

Working....

Tape Export Process terminated normally.

=====
FILE SET MENU

1 - Modify a Header File           8 - Merge Header Files with Data
2 - Modify a Map File              9 - Copy File Set to 9-Track Tape
3 - Modify a Destination System Id 10 - Merge and Copy to 9-Track Tape
4 - Create a New File Set          11 - Examine/Print Header Eval. Log
5 - Create a New Document          12 - Examine/Print Merge Process Log
6 - Add a New File to a Document   13 - Examine/Print Tape Export Log
7 - Evaluate File Set Header Records 14 - Return to the Main Menu
=====

Enter number followed by a RETURN =>

+++++
```

Figure 6.9.1-2 Copy File Set To Tape Screen

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
BUILD A TAPE FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 3

Enter the 6 character name of the tape volume id.
Press RETURN for CALS01 =>

CALS Test Network ANSI Tape Creation Software - Version 1.2; Release 10 (C)

This procedure will automatically copy your data files to tape
in accordance with ANSI X3.27. The target tape must be
loaded on tape drive for this procedure to succeed.

If tape is not loaded or the drive is allocated by another user, then exit.
Press RETURN to continue or enter any other character to cancel =>

*** DOS ERROR (alloc drive) - Computer Logics Driver Not Found.
    The Computer Logics Driver (TDRIVER) must be installed prior
    to operating the tape drive, please check that the driver is
    loaded into memory.

Press any key to continue =>
+++++
```

Figure 6.9.1-3 Copy File Set To Tape Error Screen

6.9.2 Management Information

If the user enters a File Set number outside the range of the total File Sets, an error message is displayed

and the prompt is redisplayed. If the user enters a valid File Set number but enters a tape volume id that is invalid, an error message is displayed and the prompt is redisplayed (see Figure 6.8.2-1).

NOTE

If using the DOS / Computer Logics tape controller, the tape driver (TDRIVER.EXE) must be memory-resident prior to selecting this option.

```
+++++
Enter the 6 character name of the tape volume id.
Press RETURN for CALS01 => abcde

*** ERROR (MIL-STD-1840A; 5.2.1.1) - Tape label must
    be 6 characters, please try again.

Enter the 6 character name of the tape volume id.
Press RETURN for CALS01 =>
+++++
```

Figure 6.9.2-1 Invalid Tape Volume ID Screen

TAPETOOL USERS MANUAL

FILE SET MENU

6.10 Merge and Copy to 9-Track Tape

Once the user has entered a '10' while in the FILE SET MENU (see Section 6.0), the first part of the 'Merge and Copy to 9-Track Tape' screen is displayed (see Figure 6.10-1). The 'Merge and Copy to 9-Track Tape' option was briefly explained in

Section 6.0. If there are no File Sets within the TAPETOOL directory, a message stating this is displayed and control returns to the FILE SET MENU. If there is only one File Set available, it is automatically chosen as the File Set to be used.

```
+++++
MERGE / BUILD A TAPE FROM WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.10-1 Merge and Copy to 9-Track Tape Screen

6.10.1 Control Inputs

Once the user enters a valid File Set number, the software attempts to merge the header files with the data files for each Document in the File Set. Once the merge function is complete, the user will be lead through the process of copying the File Set to 9-

track tape. This option is a combination of the 'Merge Header Files with Data' and 'Copy File Set to 9-Track Tape'. Refer to Sections 6.8 and 6.9 for more information. An example of the 'Merge and Copy to 9-Track Tape' process is shown in Figure 6.10.1-1.

TAPETOOL USERS MANUAL

FILE SET MENU

```
+++++
MERGE / BUILD A TAPE FROM WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 4

CALS Test Network Merge Process - Version 1.2; Release 10 (C)

Merge Process terminated normally.

Enter the 6 character name of the tape volume id.
Press RETURN for CALS01 =>

CALS Test Network ANSI Tape Creation Software - Version 1.2; Release 10 (C)

This procedure will automatically copy your data files to tape
in accordance with ANSI X3.27. The target tape must be
loaded on tape drive for this procedure to succeed.

If tape is not loaded or the drive is allocated by another user, then exit.
Press RETURN to continue or enter any other character to cancel =>

Working....

Tape Export Process terminated normally.

=====
FILE SET MENU

1 - Modify a Header File           8 - Merge Header Files with Data
2 - Modify a Map File              9 - Copy File Set to 9-Track Tape
3 - Modify a Destination System Id 10 - Merge and Copy to 9-Track Tape
4 - Create a New File Set          11 - Examine/Print Header Eval. Log
5 - Create a New Document          12 - Examine/Print Merge Process Log
6 - Add a New File to a Document   13 - Examine/Print Tape Export Log
7 - Evaluate File Set Header Records 14 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 6.10.1-1 Example 'Merge and Copy to 9-Track Tape' Process

6.10.2 Management Information

If the user enters a File Set number outside the range of the total File Sets, an error message is displayed and the prompt is redisplayed. All operations performed by the 'Merge and Copy to 9-Track Tape'

option are written to the Merge Process Log file and the Tape Export Log file. The results may be reviewed using the 'Examine/Print Merge Process Log' and 'Examine/Print Tape Export Log' options from the FILE SET MENU (see Sections 6.12 and 6.13).

TAPETOOL USERS MANUAL

FILE SET MENU

6.11 Examine/Print Header Eval. Log

Once the user has entered an '11' while in the FILE SET MENU (see Section 6.0), the first part of the 'Examine/Print Header Eval. Log' screen is displayed (see Figure 6.11-1). The 'Examine/Print Header Eval. Log' option was briefly explained in Section 6.0. If there are no File Sets within the TAPETOOL directory, a message stating this is dis-

played and control returns to the FILE SET MENU. If there is only one File Set available, a message is displayed indicating that this one File Set is assumed and then the Header Evaluation Log file can be examined or printed.

```
+++++
FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.11-1 Examine/Print Header Eval. Log Screen

6.11.1 Control Inputs

Once the user enters a valid File Set number, the Header Evaluation Log for the selected File Set is displayed. Figure 6.11.1-1 shows an example of a Header Evaluation Log file generated by the 'Evaluate File Set Header Records' function (refer to Section 6.7). At the print or continue prompt,

enter a 'P' if the user desires a printout of the Header Evaluation Log file. The user enters a carriage return as the default print device. Once the log file is queued for printing, control is returned to the FILE SET MENU. If the user enters a carriage return, control is returned to the FILE SET MENU without generating any printouts. For more information, see Appendix A - "Examine/ Print" General Operation.

```
+++++
Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 3

CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)

Standards referenced:
MIL-STD-1840A (1987) - Automated Interchange of Technical Information

Thu Jun 24 14:55:24 1993

MIL-STD-1840A File Set Evaluation Log

File Set: SET003

Document: D001
Extracting Document Declaration Header Records...
Evaluating Document Declaration Header Records...

srcsys: CALS Test Bed
srcdocid: Test
```

TAPETOOL USERS MANUAL
FILE SET MENU

srcrelid: NONE

--MORE--

+++++
+++++
chglvl: ORIGINAL
dteisu: 19930623
dstsys: CALS Test Bed
dstdocid: Test
dstrelid: NONE
dtetrn: 19930624
dlvacc: NONE
filcnt: C2
ttlcsl: UNCLASSIFIED
doccls: UNCLASSIFIED
doctyp: Product Data
doctl: NONE

Data file: D001C001
Extracting CGM Header Records...
Evaluating CGM Header Records...

--MORE--

+++++
+++++
srcdocid: Test
dstdocid: Test
txtfilid: NONE
figid: NONE
srcgph: NONE
doccls: UNCLASSIFIED
notes: This is the CGM notes header record.

Data file: D001C002
Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: Test
dstdocid: Test
txtfilid: NONE
figid: NONE

--MORE--

+++++
+++++
srcgph: NONE
doccls: UNCLASSIFIED
notes: NONE

Evaluating numbering scheme...
No errors were encountered during numbering scheme evaluation.
Numbering scheme evaluation complete.

Checking file count...
No errors were encountered during file count verification.
File Count verification complete.

No errors were encountered in Document D001.

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

TAPETOOL USERS MANUAL

FILE SET MENU

```
--MORE--
+++++
+++++
Enter 'p' to print the listing or press RETURN to continue =>

=====
FILE SET MENU

1 - Modify a Header File           8 - Merge Header Files with Data
2 - Modify a Map File              9 - Copy File Set to 9-Track Tape
3 - Modify a Destination System Id 10 - Merge and Copy to 9-Track Tape
4 - Create a New File Set          11 - Examine/Print Header Eval. Log
5 - Create a New Document          12 - Examine/Print Merge Process Log
6 - Add a New File to a Document   13 - Examine/Print Tape Export Log
7 - Evaluate File Set Header Records 14 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 6.11.1-1 Example Header Evaluation Log File

6.11.2 Management Information

If the user enters a File Set number outside the range of the total File Sets, an error message is displayed

and the prompt is redisplayed. When the user is prompted to print the log file or to continue, if any input other than a 'P' is entered the FILE SET MENU is redisplayed.

6.12 Examine/Print Merge Process Log

Once the user has entered an '12' while in the FILE SET MENU (see Section 6.0), the first part of the 'Examine/Print Merge Process Log' screen is displayed (see Figure 6.12-1). The 'Examine/Print Merge Process Log' option was briefly explained in Section 6.0. If there are no File Sets within the

TAPETOOL directory, a message stating this is displayed and control returns to the FILE SET MENU. If there is only one File Set available, a message is displayed indicating that this one File Set is assumed and then the Merge Process Log file can be examined or printed.

```
+++++
FROM WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>
+++++
```

Figure 6.12-1 Examine/Print Merge Process Log Screen

TAPETOOL USERS MANUAL

FILE SET MENU

6.12.1 Control Inputs

Once the user enters a valid File Set number, the Merge Process Log file for the selected File Set will be displayed. Figure 6.12.1-1 shows an example of a Merge Process Log file generated by either the 'Merge Header Files with Data' or the 'Merge and Copy to 9-Track Tape' options (refer to Sections 6.8

and 6.10). At the print or continue prompt, enter a 'P' if the user desires a printout of the Merge Process Log file. The user enters a carriage return as the default print device. Once the log file is queued for printing, control is returned to the FILE SET MENU. If the user enters a carriage return, control is returned to the FILE SET MENU without generating any printouts. For more information, see Appendix A - "Examine/Print" General Operation.

```
+++++
Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

CALs Test Network Merge Process - Version 1.2; Release 10 (C)

  Standards referenced:
    MIL-STD-1840A (1987) - Automated Interchange of Technical Information

Thu Jul 01 12:19:56 1993

MIL-STD-1840A Merge Process Log

File Set: SET001

Document: D002

Copying file from => C:\TAPETOOL\SET001\D002\D002.HDR
                to => C:\TAPETOOL\SET001\D002\D002
Extracting Map File for Document D002 ...

Mapping pair...

--MORE--

+++++
+++++

Raster Header file: D002R001.HDR
Raster Data file: C:\DATA\FILE1.GR4
To create merged file: D002R001

Merge Process terminated normally.

Enter 'p' to print the listing or press RETURN to continue =>
+++++
```

Figure 6.12.1-1 Example Merge Process Log File

TAPETOOL USERS MANUAL

FILE SET MENU

6.12.2 Management Information

If the user enters a File Set number outside the range of the total File Sets, an error message is displayed

and the prompt is redisplayed. When the user is prompted to print the log file or to continue, if any input other than a 'P' is entered the FILE SET MENU is redisplayed.

6.13 Examine/Print Tape Export Log

Once the user has entered a '13' while in the FILE SET MENU (see Section 6.0), the first part of the 'Examine/Print Tape Export Log' screen is displayed (see Figure 6.13-1). The 'Examine/Print Tape Export Log' option was briefly explained in Section 6.0. If there are no File Sets in the TAPE-

TOOL directory, a message stating this is displayed and control returns to the FILE SET MENU. If there is only one File Set available, it is automatically chosen as the File Set to be used, and then the Tape Export Log file can be examined or printed.

```
+++++
FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 6.13-1 Examine/Print Tape Export Log File Prompt

6.13.1 Control Inputs

Once the user enters a valid File Set number, the screen illustrated in Figure 6.13.1-1 is displayed. If the Tape Export Log file exists and the user desires a printout of the Tape Export Log file, a 'P' to print

is entered. The user enters a carriage return as the default print device. Once the log file is queued for printing, control is returned to the FILE SET MENU. If the user enters a carriage return, control is returned to the FILE SET MENU without generating any printouts. For more information, see Appendix A - "Examine/Print" General Operation.

```
+++++
Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 3

CALS Test Network ANSI Tape Creation Software - Version 1.2; Release 10 (C)

Standards referenced:
  ANSI X3.27 (1987) - File Structure and Labelling of Magnetic Tapes
                    for Information Interchange
  ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Thu Jun 24 15:38:25 1993

ANSI Tape Creation Log
```

TAPETOOL USERS MANUAL

FILE SET MENU

Rewinding tape to load point...

VOL1CALS01

4

Updating srcsys, dstsys, dtetrrn, & filcnt in Document Declaration File D001
Copying file from => C:\TAPETOOL\SET003\D001\D001.HDR
to => C:\TAPETOOL\SET003\D001\D001

--MORE--

```
+++++
+++++
HDR1D001          CALS0100010001000000 93175 00000 000000
HDR2D0204800260          00
```

***** Tape Mark *****

Number of data blocks written = 1.

***** Tape Mark *****

```
EOF1D001          CALS0100010001000000 93175 00000 000001
EOF2D0204800260          00
```

***** Tape Mark *****

```
HDR1D001C001      CALS0100010002000000 93175 00000 000000
```

--MORE--

```
+++++
+++++
HDR2F0080000080          00
```

***** Tape Mark *****

Number of data blocks written = 1.

***** Tape Mark *****

```
EOF1D001C001      CALS0100010002000000 93175 00000 000001
EOF2F0080000080          00
```

***** Tape Mark *****

```
HDR1D001C002      CALS0100010003000000 93175 00000 000000
HDR2F0080000080          00
```

--MORE--

```
+++++
+++++
```

***** Tape Mark *****

Number of data blocks written = 1.

***** Tape Mark *****

```
EOF1D001C002      CALS0100010003000000 93175 00000 000001
EOF2F0080000080          00
```

TAPETOOL USERS MANUAL

FILE SET MENU

```
***** Tape Mark *****
***** Tape Mark *****

##### End of Volume CALS01 #####
##### End Of Tape File Set #####

--MORE--

+++++
+++++

Rewinding tape to load point...

Tape Export Process terminated normally.

Enter 'p' to print the listing or press RETURN to continue =>

=====
FILE SET MENU

1 - Modify a Header File           8 - Merge Header Files with Data
2 - Modify a Map File             9 - Copy File Set to 9-Track Tape
3 - Modify a Destination System Id 10 - Merge and Copy to 9-Track Tape
4 - Create a New File Set         11 - Examine/Print Header Eval. Log
5 - Create a New Document         12 - Examine/Print Merge Process Log
6 - Add a New File to a Document  13 - Examine/Print Tape Export Log
7 - Evaluate File Set Header Records 14 - Return to the Main Menu
=====

Enter number followed by a RETURN =>

+++++
```

Figure 6.13.1-1 Example Tape Export Log File

6.13.2 Management Information

If the user enters a File Set number outside the range of the total File Sets, an error message is displayed

and the prompt is redisplayed. When the user is prompted to print the log file or to continue, if any input other than a 'P' is entered the FILE SET MENU is redisplayed.

TAPETOOL USERS MANUAL
FILE SET MENU

6.14 Return to the Main Menu

Once the user has entered a '14' while in the FILE SET MENU (see Section 6.0), the MAIN MENU is redisplayed (see Figure 6.14-1).

```
+++++
Enter number followed by a RETURN => 14

=====
MAIN MENU

1 - Housekeeping
2 - Build MIL-STD-1840A Files
3 - Evaluate MIL-STD-1840A Files
4 - Help
5 - Exit program
=====

Enter number followed by a RETURN =>
+++++
```

Figure 6.14-1 Return to the MAIN MENU

TAPETOOL USERS MANUAL

EVALUATION MENU

7. EVALUATION MENU

Once the user has entered a '3' while in the MAIN MENU (see Section 4.0), the EVALUATION MENU is displayed (see Figure 7.0-1). The

EVALUATION MENU is the primary menu for evaluating File Sets, Documents, and document files. Each of the EVALUATION MENU options is described below.

```
+++++
=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>

+++++
```

Figure 7.0-1 EVALUATION MENU

1-Extract/Evaluate Label Information from a Tape scans the tape, evaluates the tape labels and then builds a catalog of potential MILSTD-1840A files. The tape labels are evaluated according to ANSI X3.27 and ANSI X3.4. Error messages will be issued in the Tape Label Log file whenever necessary. The catalog step evaluates the file names and their attributes according to the MIL-STD-1840A requirements for a File Set. Error messages will be issued in the File Catalog Log file whenever necessary. (See Section 7.1)

2-Extract/Evaluate File Information from a Directory scans a given directory for the file information to be extracted and/or evaluated. The file attributes of a data file extracted from a directory must comply with the MIL-STD-1840A requirements for a File Set. Unpredictable results may occur otherwise. Since the files are essentially evaluated when the directory is scanned, the catalog process will, in most cases, yield no errors. (See Section 7.2)

If the interchange of the MIL-STD-1840A File Set was accomplished through the use of a media other than a 9-track tape according to ANSI X3.27, the files can be extracted from another directory on the system. There may be cases where the size of the data in the directory is greater than available disk space and only specific files are significant to the process.

A new File Set Directory will be created and a prompt will be issued for a File Set description. Then the function scans the directory for files named according to the MIL-STD-1840A requirements for a File Set. The file attributes are assumed based on the file type (i.e., R for Raster, Q for IGES, etc) found in the file name.

The function builds a File Catalog of potential MIL-STD-1840A files. The catalog step evaluates the file names and their attributes according to the MIL-STD-1840A requirements for a File Set. Error messages will be issued in the File Catalog Log file

TAPETOOL USERS MANUAL

EVALUATION MENU

whenever necessary.

3 - Declare File Selection Criteria provides the user the ability to declare the selection criteria for selecting files. This option is provided for the user-specified File Sets. (See Section 7.3)

4 - Extract/Evaluate Data from a Tape scans the tape, evaluates the tape labels and then builds a catalog of potential MIL-STD-1840A files. The tape labels are evaluated according to ANSI X3.27 and ANSI X3.4. Error messages will be issued in the Tape Label Log file whenever necessary. The catalog step evaluates the file names and their attributes according to the MIL-STD-1840A requirements for a File Set. Error messages will be issued in the 'File Catalog Log' file whenever necessary. (See Section 7.4)

If a File Catalog was built in Menu Option 1 or 2 and selections made in Menu Option 3, this function will extract only selected files from the tape. After extracting a file from the tape the catalog will be updated to indicate success.

After the files have been copied into the File Set Directory, the File Set Evaluation Function will proceed through each Document. As each data file is encountered, it will be divided into two more files; the Header Records and the data. The Header Records, the file naming conventions, and the 'filcnt:' field of the Document Declaration File will be evaluated. Some simple syntax errors will be corrected automatically. Error messages will be issued in the Header Evaluation Log File whenever necessary.

5 - Extract/Evaluate Data from a Directory scans a given directory for the data to be extracted and/or evaluated. The file attributes of data file extracted from a directory must comply with the MIL-STD-1840A requirements for a File Set. Unpredictable results may occur otherwise. Since the files are essentially evaluated when the directory is scanned,

the catalog process will, in most cases, yield no errors. (See Section 7.5)

If the interchange of the MIL-STD-1840A File Set was accomplished through the use of a media other than a 9-track tape, according to ANSI X3.27, the files can be extracted from another directory on the system. There may be cases where the size of the data in the directory is greater than available disk space, and only specific files are significant to the process.

A new File Set Directory will be created and a prompt will be issued for a File Set description. Then the function scans the directory for files named according to the MIL-STD-1840A requirements for a File Set. The file attributes are assumed based on the file type (i.e., R for Raster, Q for IGES, etc.) found in the file name.

The function copies each accepted file into the new File Set Directory and then builds a File Catalog of potential MIL-STD-1840A files. The catalog step evaluates the file names and their attributes, according to the MIL-STD-1840A requirements, for a File Set. Error messages will be issued in the 'File Catalog Log' file whenever necessary.

If a File Catalog was built in Menu Option 1 or 2 and selections made in Menu Option 3, this function will extract only selected files from the tape. After extracting a file from the tape the catalog will be updated to indicate success.

After the files have been copied into the File Set Directory, the File Set Evaluation function will proceed through each Document. As each data file is encountered, it will be divided into two more files; the Header Records and the data. The Header Records, , the file naming conventions, and the 'filcnt:' field of the Document Declaration File will be evaluated. Some simple syntax errors will be corrected automatically. Error messages will be issued in the Header Evaluation Log file whenever necessary.

TAPETOOL USERS MANUAL

EVALUATION MENU

When the File Set is evaluated, the evaluation process is unaware of the selection process. Errors will occur in the evaluation for missing files.

6 - **Examine/Print the 'Tape Label Log File'** displays the 'Tape Label Log File' on the terminal screen. The 'Tape Label Log File' is created each time a tape is read. Before the termination of this function, the log file may be printed on a predefined print device. (See Section 7.6)

7 - **Examine/Print the 'File Catalog Log'** displays the 'File Catalog Log' file on the terminal screen. The 'File Catalog Log' file is created each time a directory is scanned or a tape is read. Before the termination of this function, the log file may be printed on a predefined print device. (See Section 7.7)

8 - **Examine/Print the 'File Set Evaluation Log'** file displays the 'File Set Evaluation Log' file on the terminal screen. The 'File Set Evaluation Log' file is created each time a File Set is evaluated. Before the termination of this function, the log file may be printed on a predefined print device. (See Section 7.8)

9 - **Return to the Main Menu** returns control to the MAIN MENU for further instructions. (See Section 7.9)

If the user enters any input other than a number 1 - 9 or carriage return, an error message indicating an invalid response is printed on the screen, and the EVALUATION MENU is redisplayed. If the user enters a carriage return, an error message indicating the lack of a valid response is displayed and the EVALUATION MENU is redisplayed.

7.1 Extract/Evaluate Label Information from a Tape

Once the user has entered a '1' while in the EVALUATION MENU (see Section 7.0), the first part of the 'Extract/Examine Label Information from a Tape' screen is displayed (see Figure 7.1-1). The

'Extract/Examine Label Information from a Tape' option was briefly explained in Section 7.0. The user enters a File Set description for the data to be read from tape.

```
+++++
Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
+++++
```

Figure 7.1-1 Extract/Evaluate Label Information From a Tape Screen

7.1.1 Control Input

The user enters a File Set description for the data to

be read from tape, or a carriage return is entered to cancel this function. Once the user enters a File Set description, the information from tape is attempted to be read (see Figure 7.1.1-1).

TAPETOOL USERS MANUAL

EVALUATION MENU

```
+++++
Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
Label Information From Tape

Enter continuation of current 60 character record input,
or press RETURN to complete =>

CALs Test Network Tape Evaluation - Version 1.2; Release 10 (C)

Working.....

Tape Import Process terminated normally.

CALs Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Working...

Catalog Process terminated normally.

=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>

+++++
```

Figure 7.1.1-1 Evaluate Label Information From a Tape Screen

7.1.2 Management Information

scription without generating an error.

The user may enter any value for the File Set de-

7.2 Extract/Evaluate File Information From a Directory

Once the user has entered a '2' while in the EVALUATION MENU (see Section 7.0), the first part of the 'Extract/Evaluate File Information From a Directory' screen is displayed (see Figure 7.2-1). The 'Extract/Evaluate File Information From a Directo-

ry' option was briefly explained in Section 7.0. The user enters a File Set description for the file to be evaluated and a file specification of the directory where the file resides.

TAPETOOL USERS MANUAL

EVALUATION MENU

```
+++++
Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
+++++
```

Figure 7.2-1 Extract/Evaluate File Information From a Directory Screen

7.2.1 Control Input

The user enters a File Set description for the file to be evaluated and then enters a file specification of

the directory where the file resides (see Figure 7.2-1-1). In this example, no errors were found. The user may enter a carriage return at each of the prompts to cancel this function.

```
+++++
Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
File Information From A Directory

Enter continuation of current 60 character record input,
or press RETURN to complete =>

Enter the full directory specification or press RETURN to cancel:
C:\TAPETOOL\SET001\D001

CALS Test Network Directory Evaluation - Version 1.2; Release 10 (C)

Scanning.....

Directory Scan Process terminated normally.

CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Working...

Catalog Process terminated normally.

=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>

+++++
```

Figure 7.2.1-1 Evaluate File Information From a Directory Screen

TAPETOOL USERS MANUAL

EVALUATION MENU

7.2.2 Management Information

The user may enter any value for the File Set de-

scription without generating an error. If an invalid directory specification is entered, an error message is displayed and control is returned to the EVALUATION MENU (see Figure 7.2.2-1).

```
+++++
Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
NO 1840A FILES TEST

Enter continuation of current 60 character record input,
or press RETURN to complete =>

Enter the full directory specification or press RETURN to cancel:
C:\DATA

CALS Test Network Directory Evaluation - Version 1.2; Release 10 (C)

Scanning...

*** ERROR - No potential MIL-STD-1840A files were found.

Working...

Directory Scan Process terminated with 1 error(s).

Working.....

=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 7.2.2-1 File Evaluation Screen

7.3 Declare File Selection Criteria

Once the user has entered a '3' while in the EVALUATION MENU (see Section 7.0), the first part of the 'Declare File Selection Criteria' screen is dis-

played (see Figure 7.3-1). The 'Declare File Selection Criteria' option was briefly explained in Section 7.0.

TAPETOOL USERS MANUAL

EVALUATION MENU

```
+++++
DECLARE FILE SELECTION CRITERIA FOR WHICH FILE SET?...

Enter a File Set number, 1..5
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 7.3-1 Declare Selection Criteria Screen

7.3.1 Control Inputs

Once the user enters a File Set number, a prompt to clear the previous selection, to display the catalog, to add selections to the catalog, or cancel this function is displayed (see Figure 7.3.- 1-1). If the user enters a 'C' to clear the previous selection, the screen as illustrated in Figure 7.3.1-2 is displayed. If the user enters a 'D' to display the catalog, the

information as illustrated in Figure 7.3.1-3 is displayed. The user has the option to print the catalog by entering a 'P' or return to the EVALUATION MENU by entering a carriage return. After the catalog is queued for printing, control returns to the EVALUATION MENU. If the user enters an 'A' to add to the selection criteria, the screen illustrated in Figure 7.3.1-4 is displayed. If the user chooses to cancel this function, a carriage return is entered and control returns to the EVALUATION MENU.

```
+++++
DECLARE FILE SELECTION CRITERIA FOR WHICH FILE SET?...

Enter a File Set number, 1..5
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 5

Enter 'C' to Clear previous selections, 'D' to
Display the catalog, 'A' to Add selections to the
catalog, or press RETURN to cancel =>

+++++
```

Figure 7.3.1-1 Declare Selection Criteria Screen

TAPETOOL USERS MANUAL

EVALUATION MENU

```
+++++
DECLARE FILE SELECTION CRITERIA FOR WHICH FILE SET?...

Enter a File Set number, 1..5
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 5

Enter 'C' to Clear previous selections, 'D' to
Display the catalog, 'A' to Add selections to the
catalog, or press RETURN to cancel => C

D001 is all that exists; assumed...

Enter a file type to select (i.e., 'R' for Raster,
do not specify a DDF type) or 'ALL' for all types.
Enter 'D' to display or press RETURN to cancel => C

Please enter the number of the CGM file to be selected
(i.e., 11 for D001C011) or 'ALL' for all CGM files.
Enter 'D' to display, or press RETURN to cancel => ALL

CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Working...

Catalog Process terminated normally.

=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>

+++++
```

Figure 7.3.1-2 Clear Previous Selections Screen

TAPETOOL USERS MANUAL EVALUATION MENU

+++++
Enter 'C' to Clear previous selections, 'D' to
Display the catalog, 'A' to Add selections to the
catalog, or press RETURN to cancel => D

CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Standards referenced:
MIL-STD-1840A (1987) - Automated Interchange of Technical Information
ANSI X3.27 (1987) - File Structure and Labelling of Magnetic Tapes
for Information Interchange
ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Thu Jun 24 16:17:46 1993

MIL-STD-1840A File Catalog

File Set Directory: C:\TAPETOOL\SET005

Page: 1

| | Record Format/ | Block | Selected/ |
|--|-------------------|-------|-----------|
|--|-------------------|-------|-----------|

--MORE--

+++++
+++++

| File Name | File Type | Length | Length/Total | Extracted |
|-----------|----------------------|---------|--------------|-----------|
| D001 | Document Declaration | D/00260 | 02048/000001 | Selected |
| D001C001 | CGM | F/00080 | 00800/000001 | Selected |
| D001C002 | CGM | F/00080 | 00800/000001 | Selected |

Catalog Process terminated normally.

Enter 'p' to print the listing or press RETURN to continue =>

+++++

Figure 7.3.1-3 Display of the Catalog Screen

+++++
DECLARE FILE SELECTION CRITERIA FOR WHICH FILE SET?...

Enter a File Set number, 1..5
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 5

Enter 'C' to Clear previous selections, 'D' to
Display the catalog, 'A' to Add selections to the
catalog, or press RETURN to cancel => A

D001 is all that exists; assumed...

Enter a file type to select (i.e., 'R' for Raster,
do not specify a DDF type) or 'ALL' for all types.
Enter 'D' to display or press RETURN to cancel => C

Please enter the number of the CGM file to be selected
(i.e., 11 for D001C011) or 'ALL' for all CGM files.
Enter 'D' to display, or press RETURN to cancel => ALL

CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Working...

TAPETOOL USERS MANUAL

EVALUATION MENU

Catalog Process terminated normally.

```
=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
```

Figure 7.3.1-4 Add To Selection Criteria Screen

7.3.2 Management Information

If the user enters a number that is outside the range of total File Sets, an error message is displayed and the prompt is redisplayed. If the user enters a valid

File Set number but there is no selection array declared, in the File Set, a message is displayed and control returns to the EVALUATION MENU (see Figure 7.3.2-1). If the user enters any input other than the specified selections, the prompt is redisplayed.

```
=====
DECLARE FILE SELECTION CRITERIA FOR WHICH FILE SET?...

Enter a File Set number, 1..5
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 4

*** NOTE - Selection array does not exist for SET004.

=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
```

Figure 7.3.2-1 No Selection Criteria Screen

TAPETOOL USERS MANUAL EVALUATION MENU

7.4 Extract/Evaluate Data From a Tape

Once the user has entered a '4' while in the EVALUATION MENU (see Section 7.0), the first part of the 'Extract/Evaluate Data From a Tape' screen is displayed (see Figure 7.4-1). The 'Extract/Evaluate Data from a Tape' option was briefly explained in Section 7.0. If there are no File Sets within the

TAPETOOL directory, a prompt requesting the File Set description to put the data in is displayed. If any File Sets exist, a prompt requesting the user to select an existing one, create a new File Set, or cancel the function is displayed.

```
+++++
EXTRACT DATA INTO WHICH FILE SET?...

Enter a File Set number, 1..5
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel =>

+++++
```

Figure 7.4-1 Extract Data Screen

7.4.1 Control Inputs

The user is presented the option to select an existing File Set, create a new File Set, display the File Sets, or cancel the function. The user selects an existing File Set by entering a File Set number. The user creates a new File Set by entering a 'C' and then is prompted to enter a File Set description. Once the user enters a File Set description, the new File Set is

created. Once a File Set has been selected (or created), the tape is attempted to be read (see Figure 7.4.1-1). If the tape drive is not connected to the PC being used, a DOS error is displayed stating the tape drive cannot be found. If the user enters a 'D', a list of the existing File Sets is displayed and the prompt is redisplayed. If the user decides to cancel this function, a carriage return is entered and control is returned to the EVALUATION MENU.

```
+++++
EXTRACT DATA INTO WHICH FILE SET?...

Enter a File Set number, 1..5
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel => C

Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
READ TAPE

Enter continuation of current 60 character record input,
or press RETURN to complete =>

CALS Test Network Tape Evaluation - Version 1.2; Release 10 (C)
Working.....

Tape Import Process terminated normally.

CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)
Working...

Catalog Process terminated normally.
```


TAPETOOL USERS MANUAL EVALUATION MENU

CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)

Working.....

1 file(s) copied

Working.....

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

=====

EVALUATION MENU

- 1 - Extract/Evaluate Label Information from a Tape
 - 2 - Extract/Evaluate File Information from a Directory
 - 3 - Declare File Selection Criteria
 - 4 - Extract/Evaluate Data from a Tape
 - 5 - Extract/Evaluate Data from a Directory
 - 6 - Examine/Print the Tape Label Log File
 - 7 - Examine/Print the File Catalog
 - 8 - Examine/Print the File Set Evaluation Log File
 - 9 - Return to the Main Menu
- =====

Enter number followed by a RETURN =>

+++++

Figure 7.4.1-1 Extract Data From Tape Screen

7.4.2 Management Information

If the user enters any input other than a valid File Set number, a 'C', a 'D', or a carriage return, an

error message is displayed and the prompt is redisplayed. If the user creates a new File Set, any input may be given for the File Set description without generating an error message.

7.5 Extract/Evaluate Data From a Directory

Once the user has entered a '5' while in the EVALUATION MENU (see Section 7.0), the first part of the 'Extract/Evaluate Data From a Directory' screen is displayed (see Figure 7.5-1). The 'Extract/Evaluate Data From a Directory' option was briefly explained in Section 7.0. If there are no

File Sets within the TAPETOOL directory, a prompt requesting the File Set description is displayed. If any File Sets exist, a prompt requesting the user to select an existing one, create a new File Set, or cancel the function is displayed.

TAPETOOL USERS MANUAL

EVALUATION MENU

```
+++++
EXTRACT DATA INTO WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel =>
+++++
```

Figure 7.5-1 Extract/Evaluate Data From a Directory Screen

7.5.1 Control Inputs

The user is presented the option to select an existing File Set, create a new File Set, or cancel the function. The user selects an existing File Set by entering the File Set number. If the user selects to create a new File Set by entering a 'C', the prompt to enter a File Set description is displayed. Once the user enters a File Set description, the new File Set is created. Once the File Set has been selected (or

created), the directory is attempted to be read (see Figure 7.5.1-1). If the user decides to display the existing File Sets by entering a 'D', a list of the File Sets is displayed and the prompt is redisplayed. If the user enters a valid File Set number and valid directory specification but there are no files contained within the directory, an error message is displayed and control returns to the EVALUATION MENU (see Figure 7.5.1-2). If the user decides to cancel this function, a carriage return is entered and control is returned to the EVALUATION MENU.

```
+++++
EXTRACT DATA INTO WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel => C

Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
Evaluate Data From A Directory

Enter continuation of current 60 character record input,
or press RETURN to complete =>

Enter the full directory specification or press RETURN to cancel:
C:\TAPETOOL\SET001\D001

CALS Test Network Directory Evaluation - Version 1.2; Release 10 (C)

Scanning....

      1 file(s) copied

Working.....

      1 file(s) copied

Working....

Directory Scan Process terminated normally.
CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Working...
```

TAPETOOL USERS MANUAL

EVALUATION MENU

Catalog Process terminated normally.
CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)

Working.....

1 file(s) copied

Working.....

A grand total of 2 error(s), 0 warning(s), and 0 note(s) were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

=====

EVALUATION MENU

- 1 - Extract/Evaluate Label Information from a Tape
 - 2 - Extract/Evaluate File Information from a Directory
 - 3 - Declare File Selection Criteria
 - 4 - Extract/Evaluate Data from a Tape
 - 5 - Extract/Evaluate Data from a Directory
 - 6 - Examine/Print the Tape Label Log File
 - 7 - Examine/Print the File Catalog
 - 8 - Examine/Print the File Set Evaluation Log File
 - 9 - Return to the Main Menu
- =====

Enter number followed by a RETURN =>

+++++

Figure 7.5.1-1 Create a New File Set Screen

+++++

EXTRACT DATA INTO WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'C' to create, 'D' to display, or press RETURN to cancel => C

Please enter a value for File Set description
(maximum record size = 60), or press RETURN to cancel =>
NO FILES

Enter continuation of current 60 character record input,
or press RETURN to complete =>

Enter the full directory specification or press RETURN to cancel:
C:\DATA

CALS Test Network Directory Evaluation - Version 1.2; Release 10 (C)

Scanning...

*** ERROR - No potential MIL-STD-1840A files were found.

Working...

Directory Scan Process terminated with 1 error(s).

Working.....

TAPETOOL USERS MANUAL EVALUATION MENU

```
=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====
```

Enter number followed by a RETURN =>

+++++

Figure 7.5.1-2 No Files Within Selected Directory Screen

7.5.2 Management Information

If the user enters any input other than a valid File Set number, a 'C', a 'D', or a carriage return, an error message is displayed and the prompt is redis-

played. If the user decides to create a new File Set, any input may be entered for the File Set description without generating an error message. The directory specification must be a valid path or an error message will be generated when the system attempts to locate files in an undefined directory.

7.6 Examine/Print the Tape Label Log File

Once the user has entered a '6' while in the EVALUATION MENU (see Section 7.0), the first part of the 'Examine/Print the Tape Label Log File' screen is displayed (see Figure 7.6-1). The 'Examine/Print the Tape Label Log File' option was briefly explained in Section 7.0. If there are no File Sets within the TAPETOOL directory, a message stating

that there are no File Sets is displayed and control is returned to the EVALUATION MENU. If there is only one File Set in the TAPETOOL directory, it is automatically chosen as the File Set to be used, and it is displayed. Figure 7.6-2 shows an example of a Tape Label Log File.

```
+++++
ROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>

+++++
```

Figure 7.6-1 Examine/Print the Tape Label Log File Screen

TAPETOOL USERS MANUAL EVALUATION MENU

CALS Test Network Tape Evaluation - Version 1.2; Release 10 (C)

Standards referenced:

ANSI X3.27 (1987) - File Structure and Labelling of Magnetic Tapes
for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Fri Jun 25 10:05:13 1993

ANSI Tape Import Log

Rewinding tape to load point...

VOL1CALS01

4

Label Identifier: VOL1
Volume Identifier: CALS01
Volume Accessibility:
Owner Identifier:
Label Standard Version: 4

HDR1D001 CALS0100010001000000 93176 00000 000000

Label Identifier: HDR1
File Identifier: D001
File Set Identifier: CALS01
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0000
Generation Version Number: 00
Creation Date: 93176
Expiration Date: 00000
File Accessibility:
Block Count: 000000
Implementation Identifier:

HDR2D0204800260 00

Label Identifier: HDR2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

***** Tape Mark *****

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 1.

***** Tape Mark *****

EOF1D001 CALS0100010001000000 93176 00000 000001

Label Identifier: EOF1
File Identifier: D001
File Set Identifier: CALS01
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0000
Generation Version Number: 00
Creation Date: 93176
Expiration Date: 00000
File Accessibility:
Block Count: 000001
Implementation Identifier:

TAPETOOL USERS MANUAL EVALUATION MENU

EOF2D0204800260

00

Label Identifier: EOF2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

***** Tape Mark *****

HDR1D001C001

CALS0100010002000000 93176 00000 000000

Label Identifier: HDR1
File Identifier: D001C001
File Set Identifier: CALS01
File Section Number: 0001
File Sequence Number: 0002
Generation Number: 0000
Generation Version Number: 00
Creation Date: 93176
Expiration Date: 00000
File Accessibility:
Block Count: 000000
Implementation Identifier:

HDR2F0080000080

00

Label Identifier: HDR2
Recording Format: F
Block Length: 00800
Record Length: 00080
Offset Length: 00

***** Tape Mark *****

Actual Block Size Found = 800 Bytes.

Number of data blocks read = 1.

***** Tape Mark *****

EOF1D001C001

CALS0100010002000000 93176 00000 000001

Label Identifier: EOF1
File Identifier: D001C001
File Set Identifier: CALS01
File Section Number: 0001
File Sequence Number: 0002
Generation Number: 0000
Generation Version Number: 00
Creation Date: 93176
Expiration Date: 00000
File Accessibility:
Block Count: 000001
Implementation Identifier:

EOF2F0080000080

00

Label Identifier: EOF2
Recording Format: F
Block Length: 00800
Record Length: 00080
Offset Length: 00

***** Tape Mark *****

***** Tape Mark *****

End of Volume CALS01

End Of Tape File Set

TAPETOOL USERS MANUAL EVALUATION MENU

Rewinding tape to load point...

Tape Import Process terminated normally.

Figure 7.6-2 Example Tape Label Log File

7.6.1 Control Inputs

Once the user enters a valid File Set number, the software attempts to read the 'Tape Label Log' file for the selected File Set. If the log file does not exist, an error message is displayed and control is returned to the EVALUATION MENU (see Figure

%lines 9

7.6.1-1). If the user needs a listing of the existing File Sets, a 'D' is entered, the list of File Sets is displayed, and the prompt is redisplayed. If the user decides to cancel this function, a carriage return is entered and control is returned to the EVALUATION MENU. For more information, see Appendix A - "Examine/Print" General Operation.

FROM WHICH FILE SET?...

Enter a File Set number, 1..4
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 3

*** NOTE - The file cannot be listed since it does not exist.

=====

EVALUATION MENU

- 1 - Extract/Evaluate Label Information from a Tape
 - 2 - Extract/Evaluate File Information from a Directory
 - 3 - Declare File Selection Criteria
 - 4 - Extract/Evaluate Data from a Tape
 - 5 - Extract/Evaluate Data from a Directory
 - 6 - Examine/Print the Tape Label Log File
 - 7 - Examine/Print the File Catalog
 - 8 - Examine/Print the File Set Evaluation Log File
 - 9 - Return to the Main Menu
- =====

Enter number followed by a RETURN =>

Figure 7.6.1-1 No Tape Log File Within Selected Directory Screen

TAPETOOL USERS MANUAL EVALUATION MENU

7.6.2 Management Information

Set number, a 'D', or a carriage return, an error message is displayed and the prompt is redisplayed.

If the user enters any input other than a valid File

7.7 Examine/Print the File Catalog

Once the user has entered a '7' while in the EVALUATION MENU (see Section 7.0), the first part of the 'Examine/Print the File Catalog' screen is displayed (see Figure 7.7-1). The 'Examine/Print the File Catalog' option was briefly explained in Section 7.0. If there are no File Sets within the TAPE-

TOOL directory, a message stating that there are no File Sets is displayed and control is returned to the EVALUATION MENU. If there is only one File Set in the TAPETOOL directory, it is automatically chosen as the File Set to be used, and it is displayed. Figure 7.7-2 shows an example of a File Catalog.

```
+++++
FROM WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel =>
```

Figure 7.7-1 Examine/Print the File Catalog Screen

```
+++++
Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 6

CALs Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Standards referenced:
  MIL-STD-1840A (1987) - Automated Interchange of Technical Information
  ANSI X3.27 (1987) - File Structure and Labelling of Magnetic Tapes
                      for Information Interchange
  ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Fri Jun 25 10:05:19 1993

MIL-STD-1840A File Catalog

File Set Directory: C:\TAPETOOL\SET006

Page: 1

                                     Record
                                     Format/   Block   Selected/

--MORE--

+++++
```


TAPETOOL USERS MANUAL EVALUATION MENU

```

+++++
File Name          File Type          Length Length/Total  Extracted
-----
D001               Document Declaration  D/00260 02048/000001  Extracted
D001C001           CGM                F/00080 00800/000001  Extracted

Catalog Process terminated normally.

Enter 'p' to print the listing or press RETURN to continue =>
+++++

```

Figure 7.7-2 Example File Catalog

7.7.1 Control Inputs

Once the user enters a valid File Set number, the software attempts to read the file catalog for the selected File Set. If the catalog file does not exist, an error message is displayed and control is returned to the EVALUATION MENU (see Figure 7.7.1-1). If

the user needs a listing of the existing File Sets, a 'D' is entered, the list of File Sets is displayed, and the prompt is redisplayed. If the user decides to cancel this function, a carriage return is entered and control is returned to the EVALUATION MENU. For more information, see Appendix A - "Examine/Print" General Operation.

```

+++++
FROM WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 1

*** NOTE - The file cannot be listed since it does not exist.

=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++

```

Figure 7.7.1-1 Attempt To Read File Catalog Screen

7.7.2 Managment Information

If the user enters any input other than a valid File Set number, a 'D', or a carriage return, an error message is displayed and the prompt is redisplayed.

TAPETOOL USERS MANUAL EVALUATION MENU

7.8 Examine/Print the File Set Evaluation Log File

Once the user has entered an '8' while in the EVALUATION MENU (see Section 7.0), the first part of the 'Examine/Print the File Set Evaluation Log File' screen is displayed (see Figure 7.8-1). The 'Examine/Print the File Set Evaluation Log File' option was briefly explained in Section 7.0. If there are no File Sets within the TAPETOOL direc-

tory, a message stating that there are no File Sets is displayed and control is returned to the EVALUATION MENU. If there is only one File Set in the TAPETOOL directory, it is automatically chosen as the File Set to be used, and it is displayed. Figure 7.8-2 shows an example of a File Set Evaluation Log File.

```
+++++  
FROM WHICH FILE SET?...
```

```
Enter a File Set number, 1..6  
(i.e., 2 for SET002, do not use system notation).  
Enter 'D' to display or press RETURN to cancel =>
```

```
+++++
```

Figure 7.8-1 Examine/Print the File Set Evaluation Log File Screen

```
+++++  
Enter a File Set number, 1..6  
(i.e., 2 for SET002, do not use system notation).  
Enter 'D' to display or press RETURN to cancel => 6
```

```
CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)
```

```
Standards referenced:  
MIL-STD-1840A (1987) - Automated Interchange of Technical Information
```

```
Fri Jun 25 10:28:51 1993
```

```
MIL-STD-1840A File Set Evaluation Log
```

```
File Set: SET006
```

```
Found file: D001  
Renaming file from => C:\TAPETOOL\SET006\D001  
to => C:\TAPETOOL\SET006\TEMP  
Creating directory => C:\TAPETOOL\SET006\D001  
Renaming file from => C:\TAPETOOL\SET006\TEMP  
to => C:\TAPETOOL\SET006\D001\D001
```

```
--MORE--
```

```
+++++  
+++++  
Copying file from => C:\TAPETOOL\SET006\D001\D001  
to => C:\TAPETOOL\SET006\D001\D001.HDR  
Extracting Document Declaration Header Records...  
Evaluating Document Declaration Header Records...
```

TAPETOOL USERS MANUAL EVALUATION MENU

srcsys: CALS Test Bed
srcdocid: Test Doc
srcrelid: NONE
chglvl: ORIGINAL
dteisu: 19930625
dstsys: CALS Test Bed
dstdocid: Test Doc
dstrelid: NONE
dtetrn: 19930625
dlvacc: NONE
filcnt: R1
ttlcls: UNCLASSIFIED
doccls: UNCLASSIFIED

--MORE--

+++++
doctyp: Product Data
docttl: NONE

Found file: D001R001
Renaming file from => C:\TAPETOOL\SET006\D001R001
to => C:\TAPETOOL\SET006\D001\D001R001
Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: Test Doc
dstdocid: Test Doc
txtfilid: NONE
figid: NONE
srcgph: NONE
doccls: UNCLASSIFIED
rtype: 1
rorient: 000,270

--MORE--

+++++
rpelcnt: 000000,000000
*** ERROR (MIL-R-28002; 3.1.1.3) - Invalid value for 'rpelcnt':.
Expected pel path pels to be an integer greater than zero.
*** ERROR (MIL-R-28002; 3.1.1.3) - Invalid value for 'rpelcnt':.
Expected progression lines to be an integer greater than zero.
rdensty: 0000
*** ERROR (MIL-R-28002; 3.1.1.2) - Invalid value for 'rdensty':.
Expected image density => 0200, 0240, 0300, 0400, 0600, or 1200.
notes: NONE

3 error(s), 0 warning(s), and 0 note(s) were encountered
in Raster File D001R001.
Saving Raster Header File: D001R001.HDR
Saving Raster Data File: D001R001.GR4

Evaluating numbering scheme...
No errors were encountered during numbering scheme evaluation.
Numbering scheme evaluation complete.

--MORE--

+++++

TAPETOOL USERS MANUAL EVALUATION MENU

```
+++++
Checking file count...
No errors were encountered during file count verification.
File Count verification complete.

A total of 3 error(s), 0 warning(s), and 0 note(s) were
encountered in Document D001.

A grand total of 3 error(s), 0 warning(s), and 0 note(s) were
encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

Enter 'p' to print the listing or press RETURN to continue =>
+++++
```

Figure 7.8-2 Example File Set Evaluation Log

7.8.1 Control Inputs

Once the user enters a valid File Set number, the software attempts to read the 'File Set Evaluation Log' file for the selected File Set. If a 'File Set Evaluation Log' file does not exist, an error message is displayed and control is returned to the

EVALUATION MENU (see Figure 7.8.1-1). If the user needs a listing of the existing File Sets, a 'D' is entered, the list of File Sets is displayed, and the prompt is redisplayed. If the user decides to cancel this function, a carriage return is entered and control is returned to the EVALUATION MENU. For more information, see Appendix A - "Examine/Print" General Operation.

```
+++++
FROM WHICH FILE SET?...

Enter a File Set number, 1..6
(i.e., 2 for SET002, do not use system notation).
Enter 'D' to display or press RETURN to cancel => 4

*** NOTE - The file cannot be listed since it does not exist.

=====
EVALUATION MENU

1 - Extract/Evaluate Label Information from a Tape
2 - Extract/Evaluate File Information from a Directory
3 - Declare File Selection Criteria
4 - Extract/Evaluate Data from a Tape
5 - Extract/Evaluate Data from a Directory
6 - Examine/Print the Tape Label Log File
7 - Examine/Print the File Catalog
8 - Examine/Print the File Set Evaluation Log File
9 - Return to the Main Menu
=====

Enter number followed by a RETURN =>
+++++
```

Figure 7.8.1-1 No File Set Evaluation Log Files Screen

TAPETOOL USERS MANUAL EVALUATION MENU

7.8.2 Management Information

Set number, a 'D', or a carriage return, an error message is displayed and the prompt is redisplayed.

If the user enters any input other than a valid File

7.9 Return to the Main Menu

Once the user enters a '9' while in the EVALUATION MENU (see Section 7.0), control is returned

to the MAIN MENU (see Figure 7.9-1).

```
+++++
Enter number followed by a RETURN => 9

=====
MAIN MENU

1 - Housekeeping
2 - Build MIL-STD-1840A Files
3 - Evaluate MIL-STD-1840A Files
4 - Help
5 - Exit program
=====

Enter number followed by a RETURN =>
+++++
```

Figure 7.9-1 Return to the MAIN MENU Screen

7.9.1 Management Information

displayed and the EVALUATION MENU is redisplayed.

If the user enters any input that is not an option of the EVALUATION MENU, an error message is

TAPETOOL USERS MANUAL
HELP MENU

8. MAIN MENU - Help

Once the user enters a '4' while in the MAIN MENU (see Section 4.0), a message is displayed indicating that the 'help' function has not been im-

plemented yet and control is returned to the MAIN MENU (see Figure 8.0-1).

```
+++++
Enter number followed by a RETURN => 4

*** NOTE - Help not implemented yet.

=====
MAIN MENU

1 - Housekeeping
2 - Build MIL-STD-1840A Files
3 - Evaluate MIL-STD-1840A Files
4 - Help
5 - Exit program
=====

Enter number followed by a RETURN =>
+++++
```

Figure 8.0-1 'Help' Screen

If the user enters any input that is not an option of the MAIN MENU, an error message is displayed

and the MAIN MENU is redisplayed.

TAPETOOL USERS MANUAL
EXIT PROGRAM

9. MAIN MENU - Exit Program

Once the user enters a '5' while in the MAIN MENU (see Section 4.0), a message is displayed indicating that the TAPETOOL Program is terminat-

ing and control is returned to DOS (see Figure 9.0-1).

```
+++++
=====
MAIN MENU

1 - Housekeeping
2 - Build MIL-STD-1840A Files
3 - Evaluate MIL-STD-1840A Files
4 - Help
5 - Exit program
=====

Enter number followed by a RETURN => 5

- - - Terminating Tape Tools Program - - -

C:\TAPETOOL>
+++++
```

Figure 9.0-1 'Exit Program' Screen

If the user enters any input that is not an option of the MAIN MENU, an error message is displayed

and the MAIN MENU is redisplayed.

APPENDIX A "Examine/Print" General Operation.

When using the "Examine/Print" functions, the software displays the information one screen at a time. The prompt "-- MORE--" is displayed at the bottom of the screen to indicate there is more text to follow. The user enters a carriage return to display the next screen of information. When the end of file is reached, the user is prompted to enter a carriage return to continue or a 'P' to print the log. Other capabilities exist which allow the user to view the log files more efficiently. At the "-- MORE--" prompt, commands can be entered to quit viewing the log before the end is reached, to skip a user-supplied number of lines, or to search for the next occurrence of a usersupplied text string. Each of these functions is discussed below.

Quit.

If the user does not want to finish viewing the current log file, enter a 'Q' at the prompt. The display of the log will be terminated and the user will be asked to either enter a carriage return, to exit, or a

'P' to print the log.

Skip lines.

If the user wants to ignore a sequence of lines, enter a '+' followed by the number of lines to skip. For example, '+100' will skip the next 100 lines. If the end of file is reached, a message indicating that will be displayed. A message indicating the number of lines skipped will be displayed followed by the next screen of any subsequent text.

Search for text.

If the user wants to find the next occurrence of a text string, enter a '/' followed by the text string to be found. For example, '/ERROR' will find the next occurrence of 'ERROR' in the log. Only exact matches will be located. Therefore, a search for 'error' will not match 'ERROR'.

APPENDIX B - GLOSSARY

Data file.

A MIL-STD-1840A conforming file containing only Technical Publication data.

Destination System Identification.

A character string containing the name, address, and other information needed to identify the system to which the document is going.

Document.

The information content of a variety of different printed or digital entities that contain technical information. These entities may be technical manuals, drawings, specifications, lists, engineering change notices, or other information relating to the design, acquisition, manufacture, test, inspection, or maintenance of items.

Document Declaration File.

A file accompanying any set of transferred files comprising a document; provides all information necessary to the successful disposition of the digital files at the destination, but has no purpose beyond that function.

Document Type.

A class of documents having similar characteristics; for example journal, article, technical manual, or memo.

Document Type Declaration.

A markup declaration that contains the formal specification of a Document Type Definition.

Document Type Definition.

Rules, determined by an application, that apply SGML to the markup of documents of a particular type. A Document Type Definition includes a formal specification, expressed in a Document Type Declaration, of the element types, element relationships and attributes, and references that can be represented by markup. It thereby defines the vocabulary of the markup for which SGML defines the syntax.

Document File Set.

A set of documents common to one operation that imported them into the system. A Document File Set Directory is named using the prefix "SET" followed by a three digit decimal number, incremented

by one, for each Document File Set in the Root Directory. A Document File Set Directory can contain a Document File Set Description file, a Destination System file, a Tape Scan Log file, a Tape Export Log file, a Table Of Contents file, a Catalog file, a Merge Process Log file, an Evaluation Log file, and Document Directories. Each Document Directory is named after a Document Declaration File according to the MIL-STD-1840A file naming conventions.

Engineering Data.

Any data (government, contractor, or vendor) which contains authoritative engineering definition, guidance, materials, items, equipment system practices, methods, and processes relating to the design, acquisition, manufacture, test, inspection, or maintenance of items or services. It includes the following: drawings, associated lists, contractor or vendor specifications, standards, documents referenced on drawing lists, revision authorization documents, engineering change orders, government or industry associated specifications and standards, and other related documents.

File Set.

The collection of files which comprise a complete document.

Header File.

A MIL-STD-1840A conforming file containing only MIL-STD-1840A Header Records.

Map File.

A data file created and maintained internally by the TAPETOOL program. The Map File is kept for each document in its Document Directory. It contains a line for each file required in a MIL-STD-1840A interchange. The first line must always contain the name of the Document Declaration File. All of the remaining lines must contain the name of each Document Data File (named according to MIL-STD-1840A file naming conventions) followed by a blank, and the complete file specification of a file containing the data.

Measured Data Unit.

A variable length record shall be contained in a MDU. The MDU shall consist of a Record Control Word (RCW) followed immediately by the variable length record.

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APPENDIX B

Record Control Word.

The RCW shall consist of four characters which shall be coded in accordance with ANSI X3.4-1986, and shall express the sum of the lengths of the record and the RCW as a fourdigit decimal number.

Source System Identification.

A character string containing the name, address, and other information needed to identify the system from which information originated.

System.

Specific suite of computer hardware and software.

As used in the terms "Source System" and "Destination System", the term does not necessarily correspond one to one with "site" or "base", in that most prime contractor sites and DoD installations have more than one system.

Tape Set.

A group of one or more magnetic tapes which collectively represent a group of related files, comprising a specific delivery of a document or documents.

Tape Volume.

A single reel of magnetic tape with recorded data.

APPENDIX C - ERROR MESSAGES

The following is a list of the most common errors.

1. *** NOTE - Environment Name xxxxxxxx is not defined.
2. *** I/O ERROR (read_rec) - Invalid fixed record length.
Fixed bytes read => xx, Expected => yy (where xx are bytes read;
yy are bytes expected)
*** NOTE - The file is probably not an ANSI Type F file or the last
record may not be complete.
3. *** WARNING - length of input has exceeded the maximum allowable record
length of xxx. Extra characters will be truncated. (where xxx is
the record size)
4. *** ERROR (MIL-STD-1840A; 5.1.3) - A valid file type was not found for
xx. (where xx is a file type)
5. *** FATAL INTERNAL ERROR (get_array) - Maximum number of files (= xx)
exceeded. (where xx is the maximum number of files)
6. *** FATAL INTERNAL ERROR (get_array) - Maximum record length (= xx)
exceeded. (where xx is the maximum record length)
7. *** ERROR - The Document Declaration File record has no associated data
file.
8. *** ERROR (MIL-STD-1840A; 5.1.3) - xxxxxxxx.yyy has a syntax error
caused by illegal file type. (where xxxxxxxx.yyy is the
file name and extension)
9. *** ERROR - Map File does not exist for xxxxxxxx. (where xxxxxxxx is a
directory name)
10. *** NOTE - No modifications were saved for Map File.
11. *** ERROR (MIL-STD-1840A; 5.1.3) - The data files for Document
xxxxxxx were not numbered properly.
*** NOTE (MIL-STD-1840A; 5.1.3) - The first data file for a Document
shall use '001' and the number shall increment sequentially
for each file of the Document so that each file has a unique
file name.

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APPENDIX C

- 12. *** ERROR - Invalid change level encountered.
*** NOTE - Change level should be the word ORIGINAL or a Revision Number followed by a Change Level Number followed by a Change Level Date. They should be separated by a comma or space.

- 13. *** ERROR - No field name or value given for xxx. (where xxx is the record name)
*** NOTE - Correction made in new Document Declaration Header File.

- 14. *** ERROR - Colon Missing in Document Declaration header field.
*** NOTE - Correction made in new Document Declaration Header File.

- 15. *** ERROR - Invalid Document Declaration header field name xxx not found in column 1. (where xxx is the record name)
*** NOTE - It will be shifted into column 1.

- 16. *** ERROR - Invalid Document Declaration header field name.
Expected => xxx (where xxx is the record name)
*** NOTE - The value in the header field may not be evaluated.

- 17. *** ERROR - Space missing after Document Declaration header field.

- 18. *** ERROR - Value contains leading spaces.

- 19. *** ERROR - Value missing after Document Declaration header field.
*** NOTE - The header record will be given the value NONE.
*** NOTE - Correction made in new Document Declaration Header File.

- 20. *** ERROR - The value of the xxx field is a default and may not be modified at this point. (where xxx is the field name)

- 21. *** ERROR - The value of the xxx field will be automatically supplied when the tape is created. (where xxx is the field name)

- 22. *** ERROR - The value of the xxx field cannot be changed at this point. (where xxx is the field name)

- 23. *** ERROR (MIL-STD-1840A; 5.1.1.2) - The filcnt field could not be parsed.

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- 24. *** ERROR (MIL-STD-1840A; 5.1) - Invalid number of header records.
Expected = xx; Records read = yy (where xx is the maximum
number of header records; yy is the number of records
read)
- 25. *** ERROR - Document Declaration File xxx does not exist. (where xxx
is the DDF directory name)
- 26. *** ERROR - No more files can be added to xxx since it contains
the maximum number of files (= yy). (where xxx is the DDF
directory name; yy is the maximum number of files)
- 27. *** ERROR (MIL-STD-1840A; 5.1.3) - File type should have a length of
one character, please try again.
- 28. *** ERROR (MIL-STD-1840A; 5.1) - A File Set must have at least one data
file.
- 29. *** ERROR (MIL-STD-1840A; 5.1) - xxxxxxxx is all that exists. A File
Set must have at least one data file. (where xxxxxxxx is the
file name)
- 30. *** ERROR - No xxx Files exist for yyyyyyyy. (where xxx is a file type;
yyyyyyyy is the DDF directory name)
- 31. *** ERROR (MIL-STD-1840A; 5.1.1.2) - Actual xxx File Count does not
match filcnt record. Actual => yy, Expected => zz. (where
xxx is a file type; yy is the actual file count; zz is the
expected file count for the file type)
- 32. *** ERROR (MIL-STD-1840A; 5.1) - No xxx files were found. (where xxx is
a file type)
- 33. *** NOTE - There are currently no File Sets in default directory:
xxxxxxx (where xxxxxxx is the default directory name)
- 34. *** ERROR - There are no Documents in File Set xxxxxx. (where xxxxxx
is the File Set name)
- 35. *** NOTE - The file cannot be listed since it does not exist.
- 36. *** INTERNAL ERROR (scan_1840dir) - Maximum number of files (= xx)
exceeded. (where xx is the maximum number of files)
- 37. *** ERROR - No potential MIL-STD-1840A files were found.

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- 38. *** ERROR (MIL-STD-1840A; 5.1.1.1, 5.1.3) - xxx does not begin with D.
(where xxx is the File Identification)
- 39. *** ERROR (MIL-STD-1840A; 5.1.1.1, 5.1.3) - xxx has a Document Declaration Prefix in lower case. (where xxx is the File identification)
- 40. *** ERROR (MIL-STD-1840A; 5.1.3) - xxx has a file type in lower case.
(where xxx is the File identification)
- 41. *** ERROR (MIL-STD-1840A; 5.1.1.1, 5.1.3) - File name contains a punctuation character.
- 42. *** ERROR (MIL-STD-1840A; 5.1.1.1, 5.1.3) - xxx does not have a Document number. (where xxx is the file identification)
- 43. *** ERROR (MIL-STD-1840A; 5.1.3) - xxx does not have a file number.
(where xxx is the file identification)
- 44. *** ERROR (MIL-STD-1840A; 5.1.3) - xxx does not have a valid file type.
(where xxx is the file identification)
- 45. *** ERROR (MIL-STD-1840A; 5.1) - Unexpected xxx File encountered.
(where xxx is a file type)
*** NOTE - xxx Files should precede all other files. (where xxx is a file type)
- 46. *** ERROR - Invalid Recording Format: Header => xx, Expected => yy
(where xx and yy are file formats)
- 47. *** ERROR - Invalid Block Size: Header => xx, Expected => yy (where xx and yy are block sizes)
- 48. *** NOTE - Selection array does not exist for xxxxxxxx. (where xxxxxxxx is a File Set name)
- 49. *** ERROR - No Documents were cataloged in File Set xxxxxxxx. (where xxxxxxxx is a File Set name)
- 50. *** ERROR - No data files were cataloged in Document xxxxxxxx. (where xxxxxxxx is the DDF directory name)
- 51. *** ERROR - Only xx value(s) of yy were found. (where xx is the actual number of values found; yy is the expected number of values)

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52. *** ERROR - Invalid Document Declaration header field name xxxxxxx not found in column 1. (where xxxxxxx is the record name)
*** NOTE - It will be shifted into column 1.
53. *** ERROR - Invalid Document Declaration header field name.
Expected => xxxxxxx (where xxxxxxx is the record name)
*** NOTE - The value in the header field may not be evaluated.
54. *** ERROR - Space missing after Document Declaration header field.
55. *** ERROR - Value contains leading spaces.
56. *** ERROR - Value missing after Document Declaration header field.
*** NOTE - The header record will be given the value NONE.
*** NOTE - Correction made in new Document Declaration Header File.
57. *** ERROR - Invalid value for xxxxxxx. Expected => yyyyyy. (where xxxxxxx is the record name; yyyyyy is the Source Document Identification)
*** NOTE - Correction made in new xxx Header File. (where xxx is a file type)
58. *** ERROR TABLE II - Invalid value for xxxxxxx. (where xxxxxxx is the record name)
*** NOTE TABLE II - The value for xxxxxxx should be 'W' when there is only one text file. (where xxxxxxx is the record name)
59. *** ERROR - Invalid value for xxxxxxx. It cannot be 'NONE' for a Document with text. (where xxxxxxx is the record name)
*** NOTE - The xxxxxxx value for a graphic is the crossreference into the SGML Text File. (where xxxxxxx is the record name)
60. *** ERROR - Invalid value for xxxxxxx. Expected 'NONE' for Product Data. (where xxxxxxx is the record name)
61. *** ERROR (MIL-R-28002; 3.1.1.1) - Invalid value for xxxxxxx.
Actual => yy; Expected => 1 or 2. (where xxxxxxx is the record name; yy is the record value)
62. *** ERROR - Value for pel path direction was not a zerofilled three character number.
63. *** ERROR (MIL-R-28002; 3.1.1.2) - Invalid value for xxxxxxx.
Expected pel path direction => 000, 090, 180, or 270.
(where xxxxxxx is the record name)

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- 64. *** ERROR - Value for progression direction was not a zero-filled three character number.

- 65. *** ERROR (MIL-R-28002; 3.1.1.2) - Invalid value for xxxxxx. Expected progression direction => 090 or 270. (where xxxxxx is the record name)

- 66. *** ERROR - Value for pel path pels was not a zero-filled six character number.

- 67. *** ERROR (MIL-R-28002; 3.1.1.3) - Invalid value for xxxxxx. Expected pel path pels to be an integer greater than zero. (where xxxxxx is the record name)

- 68. *** ERROR - Value for progression lines was not a zero-filled six character number.

- 69. *** ERROR (MIL-R-28002; 3.1.1.3) - Invalid value for xxxxxx. Expected progression lines to be an integer greater than zero. (where xxxxxx is the record name)

- 70. *** ERROR - Value for raster density was not a zero-filled four character number.

- 71. *** ERROR (MIL-R-28002; 3.1.1.2) - Invalid value for xxxxxx. Expected image density => 0200, 0240, 0300, 0400, 0600, or 1200. (where xxxxxx is the record name)

- 72. *** ERROR - The value of the xxxxxx field may only be modified in the Document Declaration File. (where xxxxxx is the field name)

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73. *** ERROR (MIL-STD-1840A; 5.2.1.6) - Stray characters were found in the padding area of the xxx Header Block. (where xxx is a file type)
*** NOTE - Padding area will be considered to be data.
74. *** ERROR - xxxxxxxx already contains Documents. (where xxxxxxxx is a File Set name)
*** NOTE - A File Set Directory must be empty before copying data into it.

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APPENDIX D

APPENDIX D - HOW TO READ THE LOG FILES

TAPECATA.LOG File

The tape catalog file provides a complete listing of all files on the tape. It shows all of the documents, file type, and sizes in blocks. Figure D-1-1 is a sample TAPECATA.LOG file. In this appendix, the example is shown with line or functional group numbers on the left.

The first line provides information on the TAPE-TOOL version being used.

Functional group two provides information on the standards being evaluated during the parsing operation.

Line 3 displays the date and time the tape read was accomplished. Note, this is the system date and time, and it may not be correct.

Line 4 is the directory where the files from the tape have been placed.

If there are a large number of files on the tape, the tape catalog may contain several pages which are shown on line 5.

```
1  CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)
2  Standards referenced:
2  MIL-STD-1840A (1987) - Automated Interchange of Technical Information
2  ANSI X3.27 (1987) - File Structure and Labelling of Magnetic Tapes
2  for Information Interchange
2  ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII
3  Tue Aug  3 15:10:07 1993
   MIL-STD-1840A File Catalog
4  File Set Directory: /cals/u1210/Set006
5  Page: 1
```

| | File Name | File Type | Record Format/ Length | Block Length/Total | Selected/ Extracted |
|----|-----------|----------------------|-----------------------------|-----------------------|------------------------|
| 6 | D001 | Document Declaration | D/00260 | 02048/000001 | Extracted |
| | D002 | Document Declaration | D/00260 | 02048/000001 | Extracted |
| 7 | D001T001 | Text | D/00260 | 02048/000001 | Extracted |
| 8 | D001G002 | DTD | D/00260 | 02048/000003 | Extracted |
| 9 | D001H003 | Output Specification | D/00260 | 02048/000016 | Extracted |
| | D002T001 | Text | D/00260 | 02048/000002 | Extracted |
| 10 | D002C002 | CGM | F/00080 | 00800/000006 | Extracted |
| 11 | D002R003 | Raster | F/00128 | 02048/000017 | Extracted |
| 12 | D002Q004 | IGES | F/00080 | 02000/000012 | Extracted |
| | D002G005 | DTD | D/00260 | 02048/000010 | Extracted |
| | D002H006 | Output Specification | D/00260 | 02048/000061 | Extracted |

Catalog Process terminated normally.

Figure D-1-1 - Tape Catalog File

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Each of the files are now listed as they came off the tape. Each file type is show below with the mean-

ing of each data. Note the required record sizes and block lengths of the different type files.

| | | | | | |
|---|----------------|---------------------------|---------|--------------|-----------|
| 6 | D001 | Document Declaration | D/00260 | 02048/000001 | Extracted |
| | CALS File Name | CALS File Type | | | |
| | | Variable length record | | | |
| | | Record Size (Always 260) | | | |
| | | Block Size | | | |
| | | Total Number of Blocks | | | |
| | | How the data was obtained | | | |

| | | | | | |
|----|----------------|---------------------------------|---------|--------------|-----------|
| 10 | D002C002 | CGM | F/00080 | 00800/000006 | Extracted |
| | CALS File Name | CALS File Type | | | |
| | | Fixed length record | | | |
| | | Record Size | | | |
| | | Block Size (Always 800 for CGM) | | | |
| | | Total Number of Blocks | | | |
| | | How the data was obtained | | | |

| | | | | | |
|----|----------------|-------------------------------------|---------|--------------|-----------|
| 11 | D002R003 | Raster | F/00128 | 02048/000017 | Extracted |
| | CALS File Name | CALS File Type | | | |
| | | Fixed length record | | | |
| | | Record Size (Always 128 for raster) | | | |
| | | Block Size | | | |
| | | Total Number of Blocks | | | |
| | | How the data was obtained | | | |

| | | | | | |
|----|----------------|----------------------------------|---------|--------------|-----------|
| 12 | D002Q004 | IGES | F/00080 | 02000/000012 | Extracted |
| | CALS File Name | CALS File Type | | | |
| | | Fixed length record | | | |
| | | Record Size (Always 80 for IGES) | | | |
| | | Block Size | | | |
| | | Total Number of Blocks | | | |
| | | How the data was obtained | | | |

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APPENDIX D

TAPE_SCN.LOG File

The TAPE_SCN.LOG file is the location of all tape marks and file marks required by ANSI X3.27. To make the information more readable, the Header (HDR) and End-of-File (EOF) marks are decoded by TAPETOOL.

1. The first line provides information on the version being used.

2. The top of the file provides information on the standards being evaluated during the parsing operation.

3. The date and time the tape read was accomplished is now written. Note, this is the system date and time and it may not be correct.

4. The tape drive being used for the read operation.

```
1  CALS Test Network Tape Evaluation - Version 1.2; Release 10 (C)
2  Standards referenced:
2  ANSI X3.27 (1987) - File Structure and Labelling of Magnetic Tapes
2                      for Information Interchange
2  ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII
3  Tue Aug  3 15:09:51 1993
   ANSI Tape Import Log
4  Allocating tape drive /dev/rmt0...
4  /dev/rmt0 allocated.
```

The first tape label is the Volume information. Multiple volume tapes will be incremented on each additional tape. Line 1 is what is actually on the tape while line 2-6 give the ANSI X3.27 name and the value. The value of line 6 can be either 3 or 4

but the most current standard should be used. All tape labels must contain only upper case letters or numbers. Lower case letters are not permitted by ANSI X3.27.

```
1  VOL1ITDS01          CONTROLLER
2  Label Identifier: VOL1
3  Volume Identifier: ITDS01
4  Volume Accessibility:
5  Owner Identifier:
6  Label Standard Version: 4
```

4

The second tape label is the first of two data file headers. The file name is inserted in this header label (line 3). The sequence number should start at 1 and increment with each additional file. The block count (line 12) should be 000000 in HDR1

and should reflect the total number of blocks used in the EOF1 label. Header label 2 contains information on the data file. This is the same information that was displayed in the TAPECATA.LOG file.

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```
1  HDR1D001          ITDS0100010001000100 93210 93210 000000  CONTROLLER
2  Label Identifier: HDR1
3  File Identifier: D001
4  File Set Identifier: ITDS01
5  File Section Number: 0001
6  File Sequence Number: 0001
7  Generation Number: 0001
8  Generation Version Number: 00
9  Creation Date: 93210
10 Expiration Date: 93210
11 File Accessibility:
12 Block Count: 000000
13 Implementation Identifier:  CONTROLLER

14 HDR2D0204800260          00
15 Label Identifier: HDR2
16 Recording Format: D
17 Block Length: 02048
18 Record Length: 00260
19 Offset Length: 00
```

Following the second header label is a tape mark and then the actual data file. After the data file, another tape mark is inserted. TAPETOOL will report the actual block size found and the total number of data blocks read. Errors found in the data file, such as short blocks and carriage returns, will

be noted in this area. All fixed length data type must have complete blocks. If the data does not completely fill a block it must be padded with the "space" character. TAPETOOL will do this during the write process.

```
***** Tape Mark *****
Actual Block Size Found = 2048 Bytes.
Number of data blocks read = 1.
***** Tape Mark *****
```

Following the second tape mark are the two EOF labels. The first label is similar to the first HDR label with the exception of the block count (line 12)

which should reflect the actual number of blocks used. The second EOF label is the same as the second HDR label.

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```
1  EOF1D001          ITDS0100010001000100 93210 93210 000001 CONTROLLER
2  Label Identifier: EOF1
3  File Identifier: D001
4  File Set Identifier: ITDS01
5  File Section Number: 0001
6  File Sequence Number: 0001
7  Generation Number: 0001
8  Generation Version Number: 00
9  Creation Date: 93210
10 Expiration Date: 93210
11 File Accessibility:
12 Block Count: 000001
13 Implementation Identifier: CONTROLLER

14 EOF2D0204800260          00
15 Label Identifier: EOF2
16 Recording Format: D
17 Block Length: 02048
18 Record Length: 00260
19 Offset Length: 00
```

Following the second EOF label is another tape mark. The second file's header labels follows the tape mark. The TAPE_SCN.LOG will continue in this manner until all files have been read off the tape. Errors, warnings and notes will be generated as required. At the end of a file is the 'End of Vol-

ume' marks. Any errors, warnings, or notes generated during the read procedure will be tallied and noted at the end of the file. Quick Short Test Reports may not have the complete log file if no errors were reported.

```
***** Tape Mark *****
<<<<< PART OF LOG FILE REMOVED HERE >>>>>
***** Tape Mark *****
##### End of Volume ITDS01 #####
##### End Of Tape File Set #####
Deallocating /dev/rmt0...
Tape Import Process terminated normally.
```

EVALUATE.LOG File

The third of the import parsing files is the EVALUATE.LOG file. This file lists the contents of the MIL-STD1840A headers. Noted errors, warnings, and notes are included in the file. These messages indicate the paragraph of MIL-STD-1840A which is violated. This file also provides a log of the operations being accomplished by TAPETOOL during the evaluation process.

Line 1 indicates the version of TAPETOOL being used.

Group 2 indicate the standards being evaluated. The 28000 series of standards may not be displayed here.

Line 3 shows the date and time of the evaluation. This is the system date and time and it may not be correct.

Line 4 indicates the file log name.

Line 5 displays the file set where the data will be placed.

Line 6 indicates the data set found. If there are more than one document sets, this will be displayed on this line.

Group 7 shows the actual process. TAPETOOL initially reads the tape and places the files in SetXXX subdirectory. It then creates the document subdirectory (D001) and moves the files into that subdirectory while parsing the contents of the CALS headers.

Group 8 shows the Declaration file and its contents. Errors, warnings, and notes are displayed below the problem, with information indicating the standard and paragraph number. The second group 8 is the first data file.

Group 9 shows that TAPETOOL is saving the divided data files. Note that TAPETOOL saves the basic data file, the data file header, and the data as separate files in the document subdirectory.

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APPENDIX D

```
1  CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)
2      Standards referenced:
2      MIL-STD-1840A (1987) - Automated Interchange of Technical Information
3  Tue Aug  3 15:10:07 1993
4  MIL-STD-1840A File Set Evaluation Log
5  File Set: Set006
6  Found file: D001
7  Renaming file from => /cals/u1210/Set006/D001
7      to => /cals/u1210/Set006/TEMP
7  Creating directory => /cals/u1210/Set006/D001
7  Renaming file from => /cals/u1210/Set006/TEMP
7      to => /cals/u1210/Set006/D001/D001
7  Copying file from => /cals/u1210/Set006/D001/D001
7      to => /cals/u1210/Set006/D001/D001_HDR
7  Extracting Document Declaration Header Records...
7  Evaluating Document Declaration Header Records...

8  srcsys: John P. Kent, ITDS Chief Engineer, Northrop Corporation,
8  srcdocid: STPRO25.2.4
8  srcrelid: NONE
8  chglvl: ORIGINAL
8  dteisu: 19930729
8  dstsys: Jeff Fisher, Integration Manager, USAF CALS Test Bed, HQ AFMC (I)/ENCT, TechneCenter, 4027 C
8  dstdocid: STPRO25.2.4
8  dstrelid: NONE
8  dtetrn: 19930729
8  dlvaccc: NONE
8  filcnt: T1, H1, G1
8  ttclcs: UNCLASSIFIED
8  doccls: UNCLASSIFIED
8  doctyp: TEST DOCUMENT
8  docttl: Test Document STPRO25.2.4

      <<<< PART OF LOG REMOVED HERE >>>>

6  Found file: D001T001
7  Renaming file from => /cals/u1210/Set006/D001T001
7      to => /cals/u1210/Set006/D001/D001T001
7  Extracting Text Header Records...
7  Evaluating Text Header Records...

8  srcdocid: STPRO25.2.4
8  dstdocid: STPRO25.2.4
8  txtfilid: W
8  doccls: UNCLASSIFIED
8  notes: NONE

9  Saving Text Header File: D001T001_HDR
9  Saving Text Data File: D001T003_TXT

      <<<< PART OF LOG REMOVED HERE >>>>
```


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APPENDIX D

Group 10 shows that TAPETOOL is evaluating the file naming. If the files are misnamed, TAPETOOL will rename the files per MIL-STD-1840A.

Group 11 shows that TAPETOOL is checking to see if the file type and defined numbers, of these file types, in the Declaration file are correct.

Line 12 and 14 indicates that no errors were found in this document set.

Group 13 shows how each additional document set would be displayed. The log displays in the same manner for each additional document set.

Line 15 indicates the total number of errors, warnings, and notes found during the evaluation process.

```
10 Evaluating numbering scheme...
10 No errors were encountered during numbering scheme evaluation.
10 Numbering scheme evaluation complete.

11 Checking file count...
11 No errors were encountered during file count verification.
11 File Count verification complete.

12 No errors were encountered in Document D001.

13 Found file: D002
13 Renaming file from => /cals/u1210/Set006/D002
13 to => /cals/u1210/Set006/TEMP
13 Creating directory => /cals/u1210/Set006/D002

    <<<< PART OF LOG REMOVED HERE >>>>

14 No errors were encountered in Document D002.
15 No errors were encountered in this File Set.
16 MIL-STD-1840A File Set Evaluation Complete.
```

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APPENDIX E

APPENDIX E - COMMENT SHEET

This Users Manual was created by the Air Force CALS Test Bed. Comments on the manual or the tapetool software utility are welcome. Suggestions for both should be addressed to

Air Force CALS Test Bed
Suite 200
4027 Col Glenn Hwy
Dayton OH 45431-1601
(513) 427-5869 x327

Suggested Change:

Pages Number(s) _____

Paragraph(s) _____

Current Sentence Start _____

Suggested Changes: _____

Suggested Correction:

Pages Number(s) _____

Paragraph(s) _____

Current Sentence Start _____

Suggested Changes: _____

Tapetool Problems

Describe Problem: _____
